

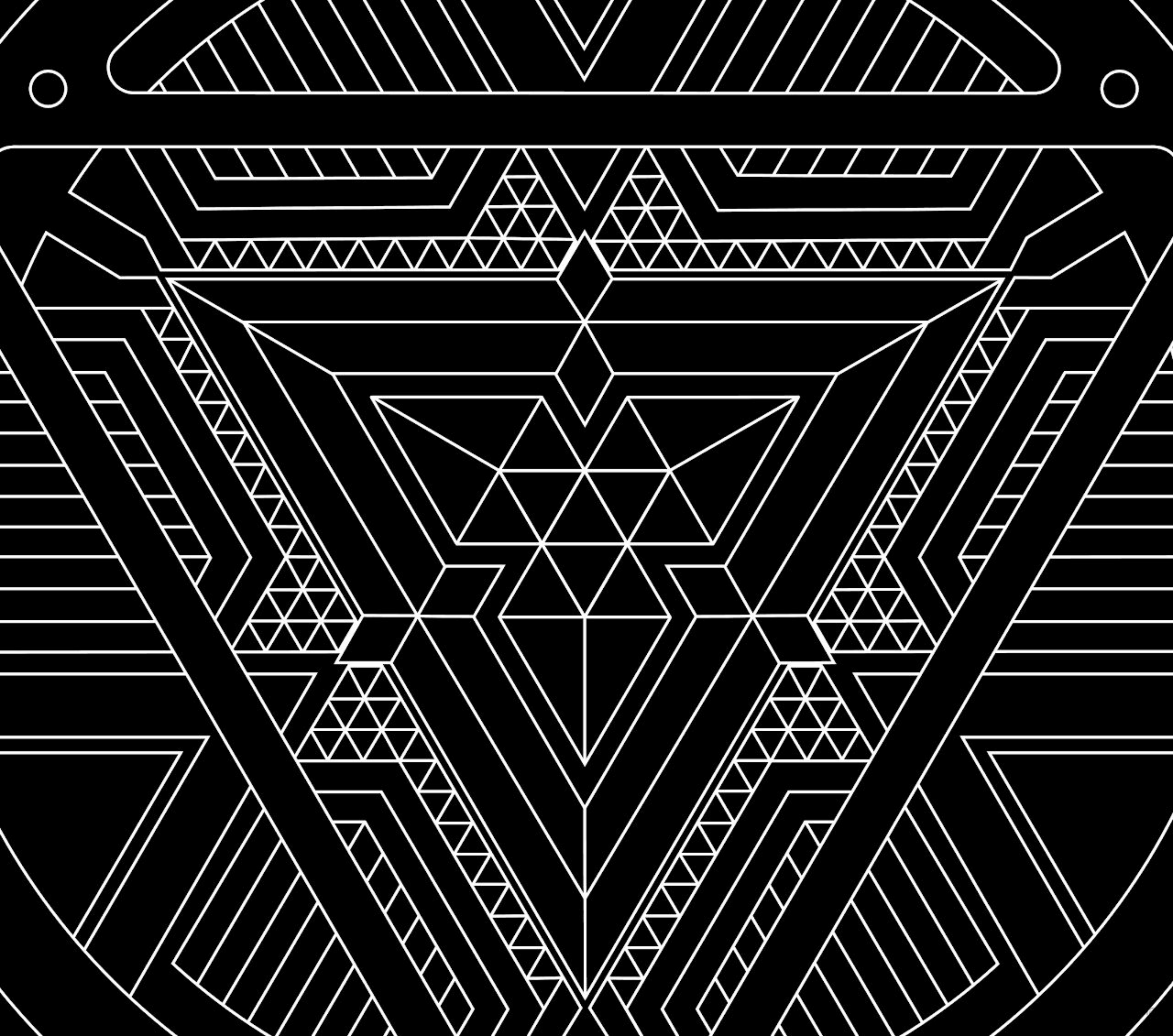


THE ART OF

MARVEL

IRON MAN 3

MARVEL







RYAN
MEINERDING



Rodney Fuentebella keyframe.

The background of the cover is a dynamic illustration by Rodney F. It features Iron Man in the foreground on the left, with his chest arc reactor glowing. In the background, Iron Man is shown in a flying pose, and the Iron Man helmet is visible on the right. The scene is set in a dark, industrial environment with sparks and light effects.

THE ART OF
MARVEL
IRON MAN 3

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EISBN# 978-1-302-37012-1

Published by MARVEL WORLDWIDE, INC., a subsidiary of MARVEL ENTERTAINMENT, LLC.
OFFICE OF PUBLICATION: 135 West 50th Street, New York, NY, 10020.

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Ryan Meinerding keyframe.



FOREWORD
BY RYAN MEINERDING

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RM



Ryan Meinerding keyframe.

Iron Man 3 is the culmination of a trilogy that started, for me, back in 2006. I was brought into the *Iron Man* art department to help out with characters and keyframes. As a comics fan, it was a dream come true: I was working on a character I loved, at a brand-new studio, for a director I loved working with. It was my first big movie, and I devoured every minute of it. From the late nights at Stan Winston with Phil Saunders and Adi Granov figuring out the Mark I—they did all the figuring on the Mark II and III—to the early mornings sketching the designs Tony was supposed to have done in the cave, it was pure joy. The camaraderie on that movie was something I will always cherish, fostered by the executives of Marvel, Jon Favreau, and Michael Riva.

Since most of the same crew came back for *Iron Man 2*, it was very easy to feel at home on that movie. The production started up pretty quickly after the first movie came out, so it basically felt like I never really left that world. We just jumped right back into designing new armors, new bad guys, and new moments for the film.

By the time *Iron Man 3* came around, my head was firmly planted in the Marvel Cinematic Universe. I loved Tony's Malibu mansion—I was there when it was first conceived, designed, and

illustrated by Mike Riva and Phil Saunders—and I've stood in Tony's garage in three different locations in two states. On that set, it's always been a comfort to see the Mark I in the Hall of Armor and reminisce about the other movies. It's safe to say I probably have a nostalgic love for Tony Stark's tech and property as much as he does.

It is due to this wholehearted investment that I was the perfect audience member for this movie. Shane Black brilliantly used all of those emotional connections to punctuate Tony's journey throughout *Iron Man 3* in a manner that displayed his own love and respect for the character. As I began sifting through all the work that was done for this film and seeing where it all ended up, it occurred to me that I, too, had been on my own journey: an emotional journey within the Marvel Cinematic Universe—one that has given me a return that I would have never expected back in my cubicle in 2006. It has allowed me to value the nostalgia of where Tony has been, but also look to the future and all the places he could go. *Iron Man 3* is the end of one journey and the beginning to many more. I will be forever grateful to Shane Black, Kevin Feige, Louis D'Esposito, Victoria Alonso, Jon Favreau, and all the executives at Marvel for allowing me to participate in this wild ride one more time.



Ryan Meinerding

INTRODUCTION

BACK TO THE CAVE

IN 2008, THE FIRST *IRON MAN* FILM LAUNCHED A FRANCHISE—and along with it, a whole new way of looking at super-hero movies. Audiences loved the action, the humor, the subtle social commentary, and the flawed character of Tony Stark, played to perfection by Robert Downey Jr. On every level, the film was a success.

But another factor also caught viewers' attention, intriguing them with the promise of a different kind of cinematic experience. From that very first Marvel film, it was clear that Tony Stark was part of a larger universe. Taking a cue from their source material—the Marvel comics that had captivated readers for decades—Marvel Studios crafted that cinematic universe one piece at a time, through *The Incredible Hulk*, *Iron Man 2*, *Thor*, and *Captain America: The First Avenger*. These characters ultimately came together in the ultra-blockbuster *Marvel's The Avengers*, which broke box-office records, thrilling audiences and critics around the world.

Flash forward to today. *Iron Man 3* is the third entry in a popular trilogy, but it's also the studio's first film following the success of *Marvel's The Avengers*. This situation posed a unique series of challenges.

"The film is the start of something new *and* bringing something to a close, so it's trying to do two things at once," says Stephen Broussard, Executive Producer of *Iron Man 3*. "And much like the first *Iron Man* movie was about launching Marvel Studios as its own independent entity, *Iron Man 3* has the burden of being the first post-*Avengers* movie, to set the tone for what that could mean."

So how did the filmmakers approach this challenge? How do you follow up the spectacular, multiple-character team-up action of *Marvel's The Avengers*, in which Iron Man fought alongside gods and monsters against a massive alien invasion?

The answer: Take Tony Stark back to the cave.



Iron Man (2005) #27, pages 3-4,
by Carlo Pagulayan, Jeffrey Huet & Dean White.

The Marvel logo is in the top left corner, featuring the word "MARVEL" in white capital letters on a red rectangular background.

WARREN ELLIS • ADI GRANOV

IRON MAN EXTREMIS



Cover to *Iron Man: Extremis* (2010 hardcover edition) by Adi Granov.

"We talked a lot about the cave in *Iron Man 1*," Broussard explains. "Tony was stripped of everything and thrown in a cave, and he came out a super hero. We wanted this entire movie to have that feeling of the cave."

Kevin Feige, Producer of *Iron Man 3* and President of Marvel Studios, agrees. "*Iron Man 3* is very much inspired by the first half of *Iron Man 1*," he says. "We've always said let's get Tony back to the cave, where he's backed up against a wall and he's gotta use his intelligence to get out of it. He can't call Thor, he can't call Cap, he can't call Nick Fury, and he can't look for the Helicarrier in the sky."

Faced with the challenge of topping *Marvel's The Avengers*, the studio braintrust decided to go against expectations and, instead, *narrow* the new film's focus. "We're not aiming for bigger, necessarily," Feige says. "We're aiming for different and fresh and new."

Broussard elaborates: "We made the decision that, post-*Avengers*, wherever possible, these movies were going to go back into their own worlds. Tony is interesting on his own. We haven't seen Rhodey lately; we haven't seen that much of Pepper Potts or Stark Industries. These things that are central to Tony's world—let's have fun exploring those, because they're so rich and there's so much there in the comics."

"Once we made that decision, to just go back and focus on Tony's world, it freed us up in a way that was exciting. It allowed us to not be beholden to a lot of the other, larger, Marvel Cinematic Universe continuity."

Louis D'Esposito, Executive Producer and Co-President of Marvel Studios, adds: "What's great about our Marvel characters is that they're interesting without their super-powers. People can relate to Tony Stark. You feel he's a real person—the same as Captain America and Thor, with Thor being a son, and having father issues and brother issues. Our heroes are successful because of that relatability. They have these issues and obstacles that they have to overcome besides playing out on the world stage."

Key to this approach was the vision of new director Shane Black. Black had built an impressive reputation by writing the *Lethal Weapon* movies, and he had consulted informally on the first two *Iron Man* films. His directorial debut, *Kiss Kiss Bang Bang*, starred a face familiar to Marvel movie fans: Robert Downey Jr.

"You hire a director ultimately to imprint their personality on a story," D'Esposito says, "and you look at Shane Black and what he's accomplished over the years. You know you're gonna get an interesting tone, an interesting take on the film."

Broussard: "We always ask, very consciously, with every movie we make: Why do audiences need to go back to see this movie? What are we giving them that's different, that's fresh? With *Iron Man 3*, that began with the choice of a new filmmaker, putting Shane Black in the director's chair. We knew it would stamp this as something different than what they'd seen before."

"To me," Black says, "it's about capturing and doubling the intensity that *The Avengers* managed to capture. We're trying to get as much into this film as we can, to get a ton of thrills in a short space and make a nice little stew."

With a new director at the helm, the studio faced yet another balancing act: keeping the series fresh, while remaining faithful to the vision of the first two films.

"Clearly, as a storyteller, Shane Black had his take," says Victoria Alonso, Executive Producer of *Iron Man 3* and EVP of VFX and Post Production. "Shane of course brought his vision to the story, and contributed to the look of it. But as far as the look of the suits and the look of what Iron Man's style is, we had it pretty well established in other movies. So we tried to stay respectful to what we had done before."

Even as the filmmakers threw Tony Stark back—metaphorically—into that cave in Afghanistan, they themselves reached back to a graphic novel that had already provided crucial inspiration: Warren Ellis and Adi Granov's pivotal Iron Man story, *Extremis*.

Iron Man was created in 1963, in a story for the anthology series *Tales of Suspense*. Stan Lee, the father of Marvel Comics, plotted the story around a costume design and cover by legendary artist Jack Kirby. Lee's brother, writer Larry Lieber, then scripted it over artwork by Don Heck.

The initial origin, heavily influenced by Cold War politics, featured munitions manufacturer Tony Stark, who is captured by enemy soldiers while on a tour of Vietnam and forced to build them a weapon.

Stan Lee describes his creation of the character: "He's an inventor. He's a multimillionaire. He's good looking. He likes the women...but there should be something tragic about him. And then it occurred to me if somehow, when he got his iron

armor, he gets into a fight, and he gets injured in his chest. And his heart is injured, and he has to wear this little thing that runs the iron armor. He has to wear that on his chest because it also keeps his heart beating. And that would make him a tragic figure as well as the most powerful guy. So I thought the readers would like him even more with that little bit added to it."

In 2004, Marvel Comics called on Warren Ellis and Adi Granov to update and revise the Iron Man character. Ellis made several crucial changes, including moving the origin to Afghanistan and replacing the Cold War villains with modern terrorists. He also added a deeper political awareness to Tony Stark, heightening the character's sense of guilt over the many deaths



Iron Patriot from the variant cover to *Dark Avengers (2009) #1* by Marko Djurdjevic.



Cover to *Iron Man* (1998) #63 by Paolo Rivera.

his munitions have caused.

Granov, who has provided designs for all three *Iron Man* films, says, “The *Extremis* book Warren and I did has been a constant guide with the *Iron Man* movies, which is fairly surprising as it’s only six issues among decades of the character’s history. But on the other hand, I think, it brought a sense of realism and weight to the character which was hard to pin down previously, possibly because of those decades of history. *Extremis* gave Iron Man a focus, and I attempted to make it as cinematic as possible.”

Tony Stark had always been a self-made man, a magnate whose riches derived from his unmatched genius as an inventor. Now, inspired by the real-world terrorists of the 21st century, Ellis and Granov gave Tony the perfect setting to build his first armor: the cave.

The filmmakers seized on that image. “I think he was always a super hero,” Broussard says, “but he just got his head right in a cave in Afghanistan, and that’s when he became Iron Man. He started to embrace that in the last few seconds of the first film, then spent *Iron Man 2* trying to figure out exactly what that means—kind of overcorrecting and saying, ‘I don’t need anyone’s help, I can do this on my own,’ before growing a little bit at the end of that film. And then, of course, in *The Avengers*, he does learn what teamwork means, and he learns what it means to be a super hero in the larger context of the world.”

In developing the villains for this third installment of the series, the filmmakers looked, once again, to Ellis and Granov’s *Extremis*. In *Iron Man 3*, industrialist Aldrich Killian develops the Extremis process, a bioengineering formula that literally rewrites the human body from the inside out.

Marvel Comics Executive Editor Tom Brevoort says, “In the original *Extremis* comic-book story, writer Warren Ellis took his cues from the school of scientific thought that believes that there are markers within the human genetic code designed to allow us to ‘hack’ our own bodies, and to make improvements at the genetic level. Such a process could be used for a variety of purposes—everything from curing terminal diseases to weaponizing the human body itself. In the original story, there’s only a single person augmented by the Extremis enhance—the extremist militia member Mallen. The film, on the other hand, goes all-in by presenting a number of Extremis-enhanced subjects.”

The villains in *Iron Man 3* aren’t all super-soldiers and inventors. Another figure, the mysterious Mandarin, was pulled from the earliest Iron Man comics and given a complete makeover.

Oddly enough, the Mandarin had been planned as a

villain for the first *Iron Man* film, before the story took a different turn. “Early—and very late—drafts of *Iron Man 1* featured the Mandarin as a villain,” Kevin Feige explains. “The Mandarin is Iron Man’s most famous foe in the comics mainly because he’s been around the longest. But if you look, there’s not necessarily a definitive Mandarin storyline in the comics.”

“So it was really about having an idea. In terms of the Fu Manchu stereotyping that was involved, we never had any interest in that. He’s relentless; no other villain has been able to strike that fast and that hard at one of our heroes.”

Crucial to the modern-day realization of the Mandarin was the casting of acclaimed actor Ben Kingsley. He brings both a weight and a humor to a character whose motives are often elusive. “He’s so excited about his part and so into this character, and frankly just scaring the heck out of everybody,” Feige says—including, of course, Tony Stark.

And Tony already has plenty of enemies—including, at times, himself. “I think the most important statement in his entire life, onscreen, was at the end of *Iron Man 1* when he said, ‘I am Iron Man,’” Broussard says. “Because he said that, but he didn’t really know what it meant. We’ve spent a lot of the movies since then exploring what that means.”

“Once we tracked his journey, where he’d been in the three films to date, we started to plan where he would go in the next one—that continuous exploration of what it means to say, ‘I am Iron Man.’ What are your responsibilities when you have all this intellect, all this money and power, and now access to these other supreme beings that you’re working alongside? Where do you go from there? How do you keep growing, how do you keep balancing your life—while also still having interesting relationships with the women in your life, the friends in your life? How does it affect all that? We’ve basically spent three movies exploring that one sentence and what it means: I am Iron Man. Because it’s just so endlessly fascinating.”

In addition to the villains and character conflict, *Iron Man 3* features the largest array of Tony Stark technology ever assembled on film—a mind-blowing assortment of Iron Man armors designed for land, sea, air, and even space.

“We built 41 suits for this movie,” Alonso says. “One of our biggest, most complicated challenges was that every suit—whether it’s for a particular sequence where there’s only one suit or whether there are multiples—had to have a personality and a look that audiences could enjoy. That was a big challenge.”

“In this movie, the suits have their own A.I.—Tony can control them. One thing we did in *Avengers* is that he actually flies, lands, and the suit opens up in motion as he’s walking into



Cover to *New Avengers* (2005) #8
by Steve McNiven, Danny Miki & Frank D'Armata.



Cover to *Iron Man* (2005) #17 by Gerald Parel.

Stark Tower. In this movie, we designed a language where the suits can, upon command, come to him. Now, it doesn't always happen exactly as Tony Stark plans it, which is part of the fun. But the A.I. is there; he's designed it so the suits can come to him in a situation when needed.

"We've never seen multiples of these suits before, and now we have a phenomenal 22-minute sequence that completely rocks. We're able to show on display all the artificial intelligence that Tony Stark created, in a pretty phenomenal way. That's very exciting."

One thing everyone involved with *Iron Man 3* agrees on: The character of Tony Stark is constantly changing.

"He's always a work in progress," Broussard says. "He's imperfect, which is what makes him so interesting. You can't ever have a character that stays stagnant—they have to continually be growing."

"This is essentially the fourth chapter in Tony Stark's story on screen. How do you keep it interesting? How do you keep him growing, changing, giving him new challenges? Knowing that it probably won't be his last onscreen adventure, so you can't just dust your hands and say, 'Well, that was Tony Stark's story, kids.'"

D'Esposito adds: "In *Iron Man 1*, Tony's faced with a dilemma where he's in a cave, and he has to save his life and really think about his purpose. In *Iron Man 2*, he's fighting demons, he thinks he's dying, and it's maybe a little bit narcissistic. In *Avengers*, he really makes a sacrifice play and sacrifices his own life for the good of mankind. I think all those experiences lead up to *Iron Man 3*. He's certainly a more developed person."

Black adds: "The way to go about doing a part three, if you're ever in that position—as I'm lucky enough to be—is to find a way that the first two weren't done yet. You have to find a way to make sure that the story that's emerging is still ongoing and, by the time you've finished number three, will be something resembling the culmination of a trilogy. I think we've really found ways to make this feel organic and new, based on what's come before, and that's what I'm happy about."

And that's Tony Stark all over: a mixture of new and old, high-tech and low. Champagne brunches on the Riviera, followed by long nights sweating over a welding torch in a rural tool shed.

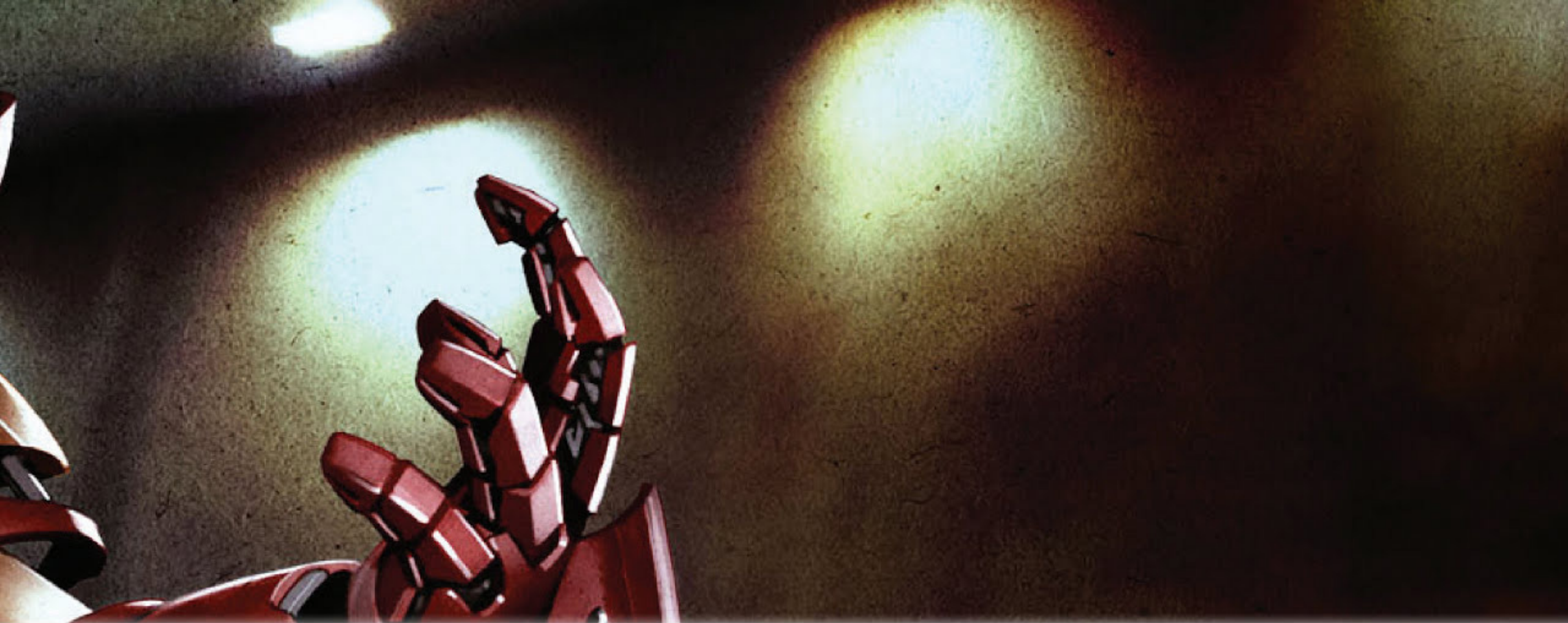
The penthouse and the cave.

Broussard sums up the series: "It's gotta keep going in ways that feel like you're doing something new and cool, without spinning your wheels. That's always the challenge of a part three, or a part four, depending on how you look at it. And we're always up for a challenge."



THE HERO— INSIDE AND OUT





Industrialist Tony Stark left the global arms race behind in the original *Iron Man* movie, when he declared that Stark Enterprises was no longer designing and manufacturing weapons.

But the arms race has gone on without him. Old flame Maya Hansen has developed Extremis enhancers—biological weapons injected directly into human bodies, creating extra-powered warriors. These Extremis agents don't need artificial armor to wield their weapons. They are weapons. And when Tony Stark finds himself alone far from his armory, could he—a fragile human—be outgunned?

Not likely. Even without an Iron Man suit, Tony Stark is still more than a match for the Mandarin and his team of super-warriors. “In half the movie, he doesn't even have a suit. He's improvising,” says Stephen Broussard, Executive Producer of *Iron Man 3*.

Plus, Tony Stark has never stopped creating. All along, he's been building newer, more powerful armors—all designed for specific purposes. Deep-sea diving, space travel, stealth, heavy lifting, disaster rescue—Tony Stark is a man who always has the right tool for the job. Even if the right tool is just his brain in a hardware store.



IRON MAN MARKS I-VII

In *Iron Man*, Tony Stark created his first armor in a cave in Afghanistan. Since then, we've watched him innovate his way through six other models on-screen. And like the man inside the suit, his tech is constantly evolving.

Broussard explains: "I always go back to my favorite movies, like *Star Wars*. The Millennium Falcon was an awesome ship, but it wasn't working half the time. The fact that it wasn't always reliable made it so much more exciting,

made the predicaments so much more fun and cool. Tony is always working on himself, and that's reflected in the fact that he's always building new suits and improving them—thinking about what he can do differently. Sometimes he is at so much the bleeding edge of technology, it's not quite ready for prime time. Half the time, stuff is going wrong, and he has to deal with that."



Tony Stark isn't the only one improving the suits. The look of the Iron Man armors starts with the Visual Development Department at Marvel Studios, where artists digitally paint new designs. Some of these are based on Iron Man's long, rich history in Marvel comic books, while others are imagined for the movies. From there, the artwork is rendered to

3-D sculptures, then sent to Legacy Effects to be physically created.

"We have the luxury of doing multiple films in the series," Legacy Effects Supervisor Shane Mahan says. "Each time, we have the opportunity to correct and modify the structures, methods, and materials to create better suits."



IRON MAN MARK VII: MINE REMOVAL DEVICE

Iron Man's Mark VII suit took a heavy beating at the end of *Marvel's The Avengers*. By the beginning of *Iron Man 3*, Tony Stark has repaired and updated it. "As the Mark VII was designed as a modular suit, it made sense to design an articulated gauntlet that would fit over the existing forearm and glove in place of the weapons pod," Concept Artist Phil Saunders says.

"A supplemental arc generator on the forearm feeds into repulsors on the fingertips—the initial idea being to create a gesture where Tony would put his fingers together in a pincer grasp and open his hand, drawing a 'bubble' of RT energy out of his palm repulsor. He could then project that around the mine and allow it to detonate within a containment field of RT energy."

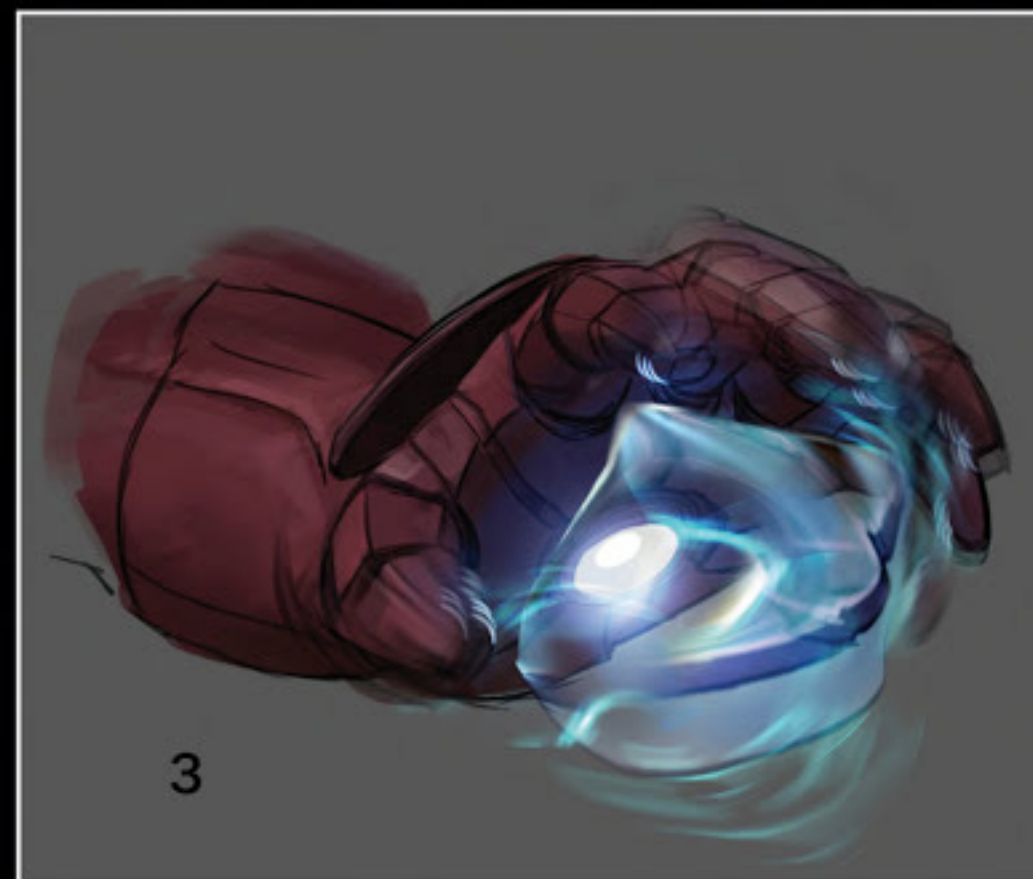




Phil Saunders concept art.



VERSION 1 - charging



Rodney Fuentebella concept art.

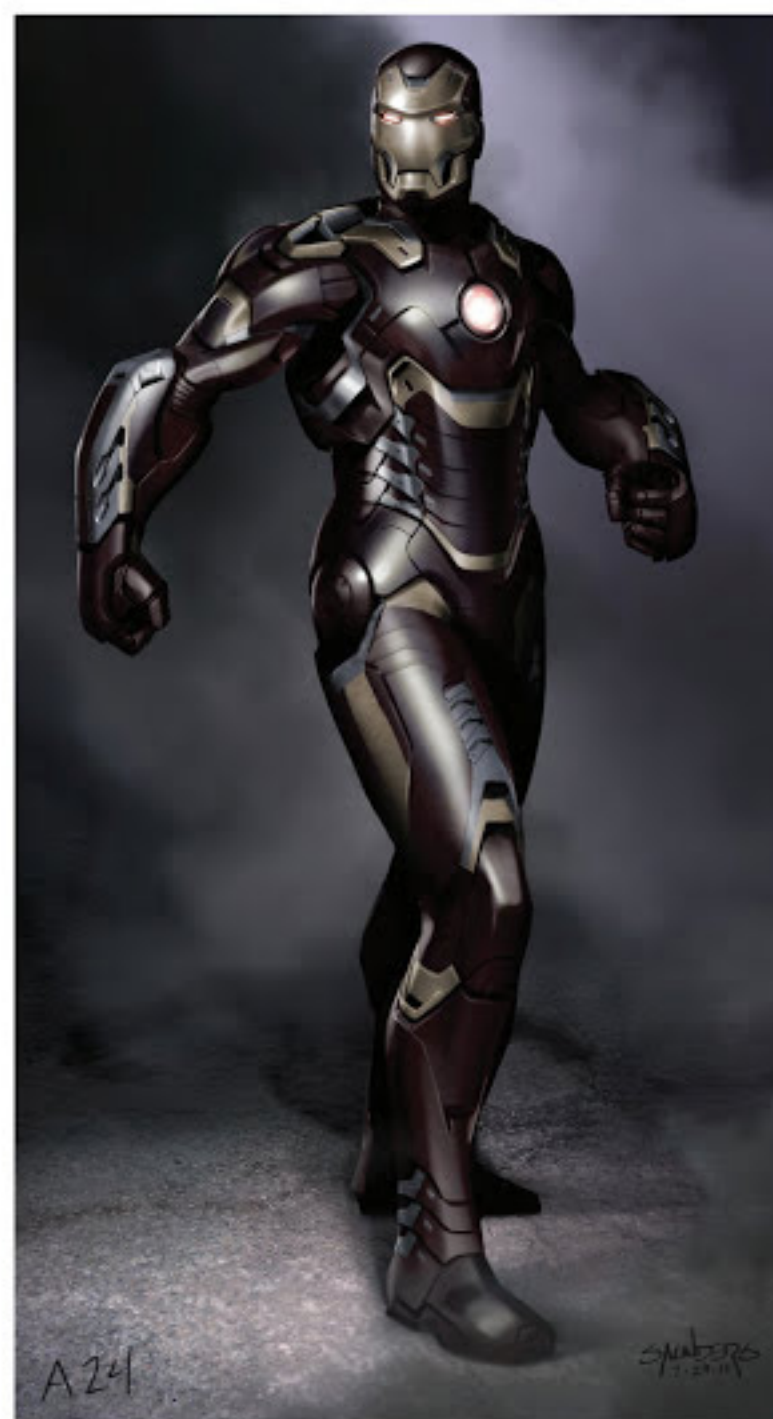


IRON MAN MARK XLII

Phil Saunders
concept art.

Supervisor Ryan Meinerding and the Visual Development team were tasked with creating a new suit for *Iron Man 3* that was different but still clearly Iron Man. “The previous suit designs—except for the Mark I and Mark V—were all fairly reminiscent of the Mark III,” Meinerding says. “Director Shane Black and Marvel were interested in trying to find a new aesthetic—to hopefully mark a character change in Tony, as well as help communicate the suit’s prehensile capabilities.

“We had a challenging time coming up with a design language that felt different. In the end, we changed the color proportions to where the suit is primarily gold with some of the gray metal understructure showing through. Phil and I shared design responsibilities on this one, and it was a great collaboration.”





Concept art by Rodney Fuentebella (top), Adi Granov (bottom left) and Phil Saunders (bottom right).

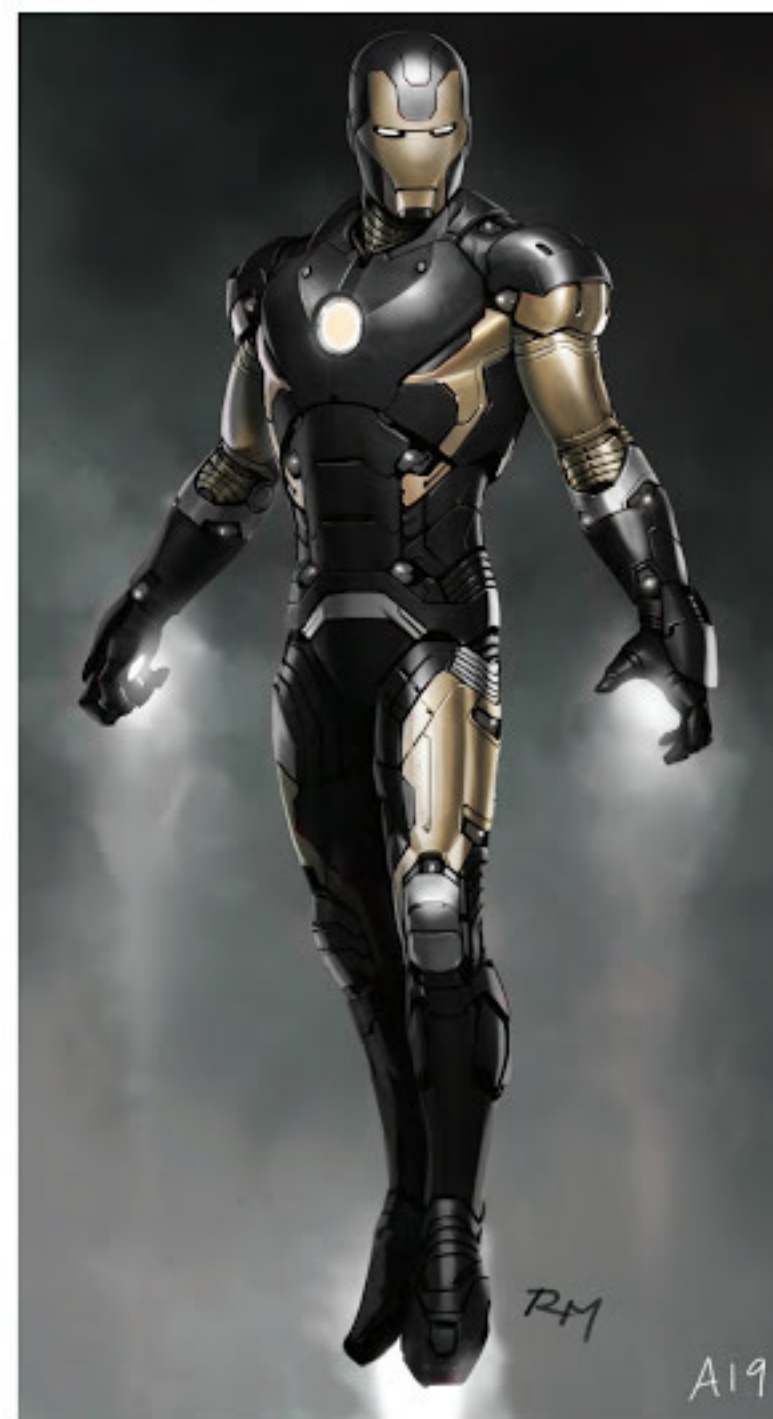
Andy Park concept art.

Exploration designs of the Iron Man helmet
by Ryan Meinerding.





Ryan Meinerding
concept art.



$\Delta 1a$

Phil Saunders
concept art.



A 05



Concept art by Charlie Wen
(top) and Ryan Meinerding
(bottom).

$\Delta 1b$

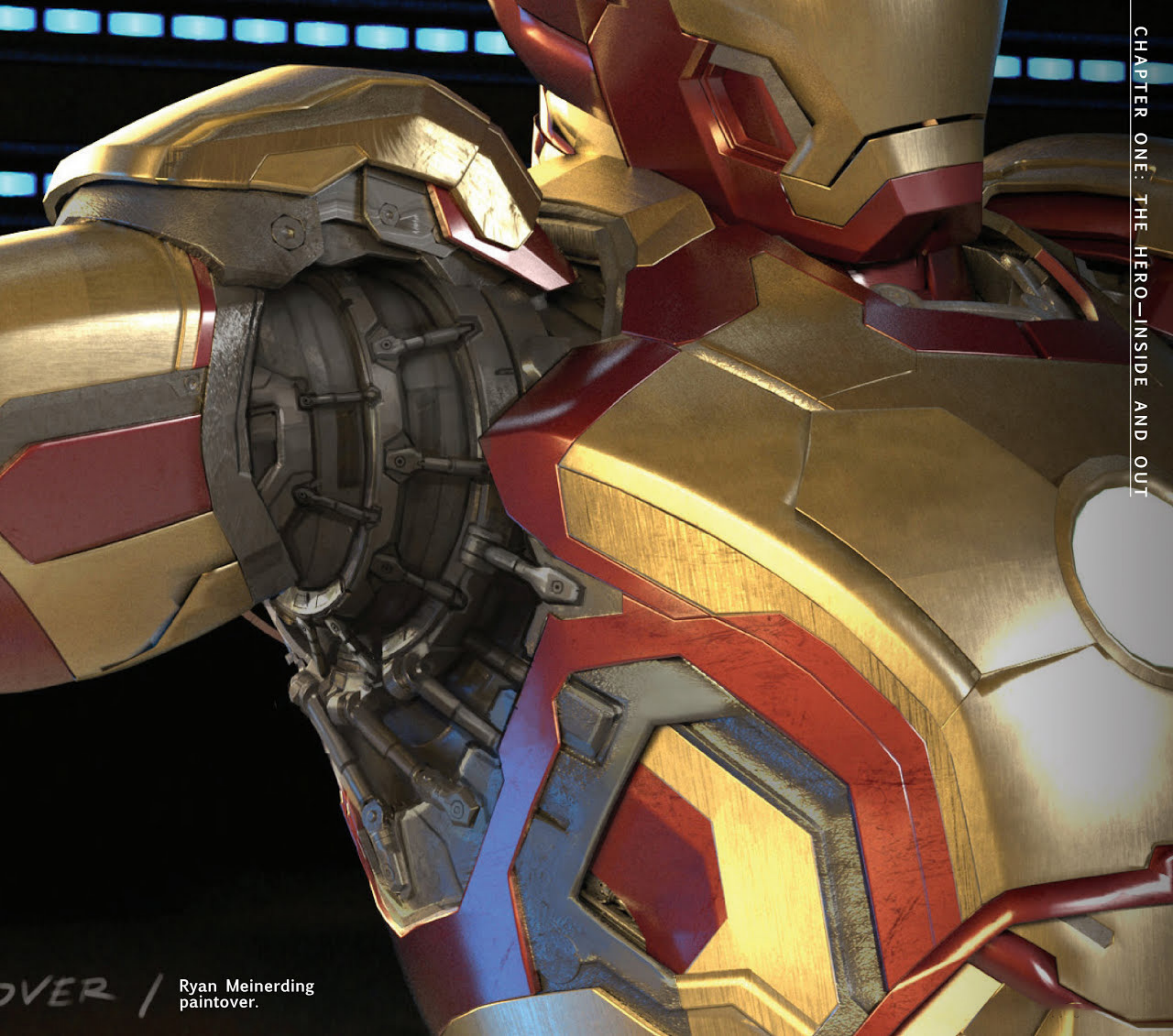
Phil Saunders
concept art.



Digital Sculptor Josh Herman: “The front and back views of the Mark XLII are a 3-D model. It’s the digital version of transitioning from paper to a sculpture. Sometimes we have to make minor tweaks when things don’t quite work, but most of the time the guys who work here know how to paint well enough that it already looks pretty good. But sometimes it just doesn’t look as cool as you thought it would look once you start turning it

around. So it’s just kind of about adding a little more flavor to it. We went through a lot of subtle changes on the new Mark XLII helmet.”

Legacy Effects Supervisor Shane Mahan helped bring the Mark XLII to life. “The soft suit for *Iron Man 3* was a boon for Robert, and it really looked good on camera.”



OVER

Ryan Meinerding
paintover.

TONY'S UPDATED RT



FULL SIZE

"The world calls it an arc reactor; we call it an RT, which is repulsor technology," explains Property Master Russell Bobbitt, who designs and manufactures Tony Stark's arc reactor—the chest piece that saved his life and powers the Iron Man armor. "It takes about 60 or 70 people to make the arc reactor, and a good six to eight weeks to make it happen."

"In every *Iron Man* movie, Robert comes up with a new motivation to redesign that thing. He'll say something like: 'We're going to take that one triangle we have and break it up into a thousand triangles because I need to break up the molecular structure

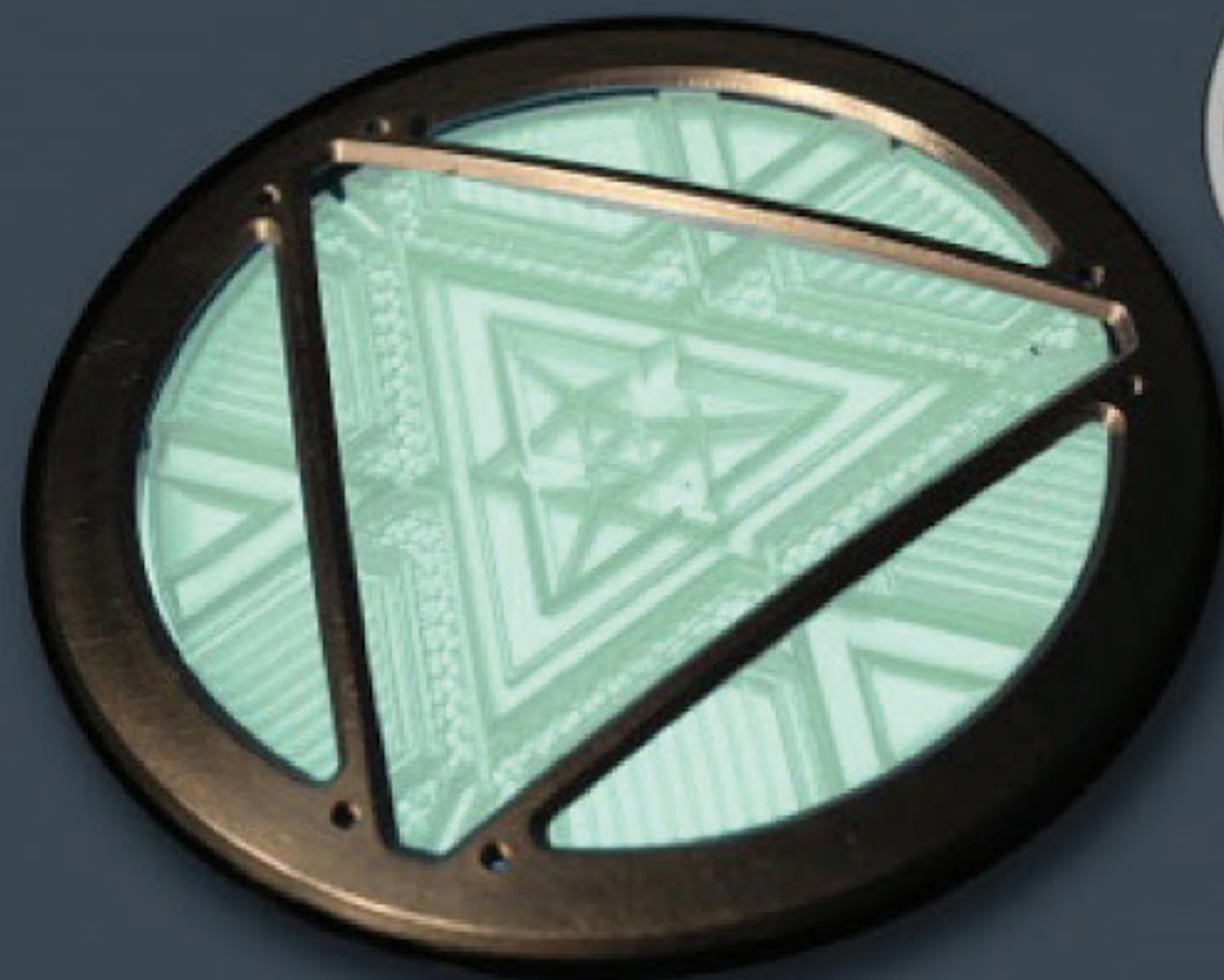
of the energy so that it's increased by a thousand.' Then he and I sit and work the details out, and then I redraw and rebuild it."

"A lot of craziness goes on inside it just to make it light up. And we have it on a remote control because the battery has such a short life span, since I have such a small piece of real estate to put in electronics and lights. And then we make a new one for each film. And every time I make a new one, I have to make three backups because Robert does stunts and sometimes they get broken. The arc reactor has been a piece of my life for six years now."





Original



Clear Design
Tinted Field
(Actual Size)*

Tinted Design
White Light
(Actual Size)*

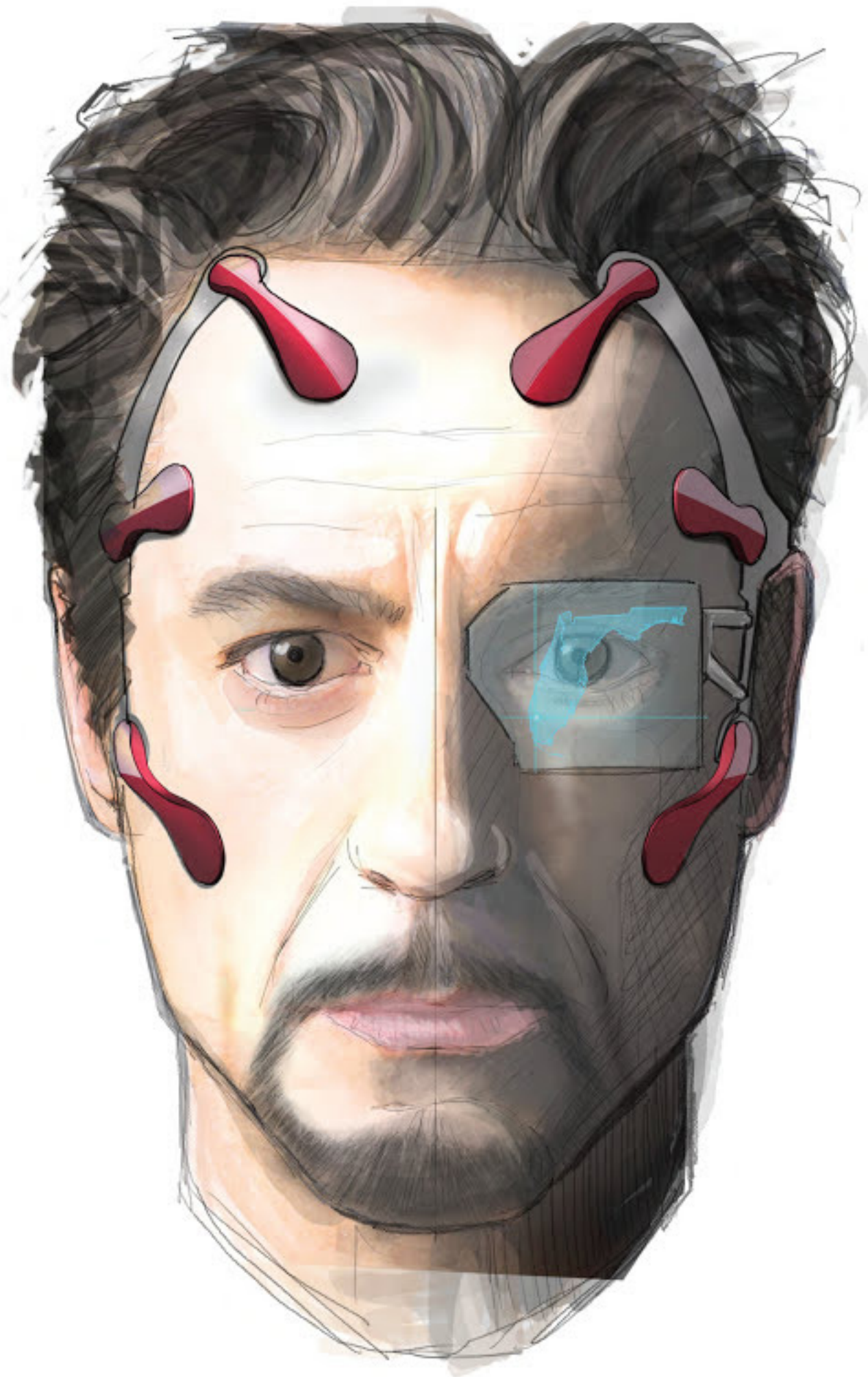


* Actual Size when printed at 300DPI no scaling.

AUGMENTED-COGNITION HEADSET

“In layman’s terms, this is a remote-control headset that works on algorithms in your mind,” Bobbit says. “We designed and fit it to Robert’s head to look like

no other headset. We tease it early on and throughout, then it pays off in the end when people learn it’s used for remotely controlling several Iron Man suits.”



FRONT VIEW

Ron Mendell concept art.

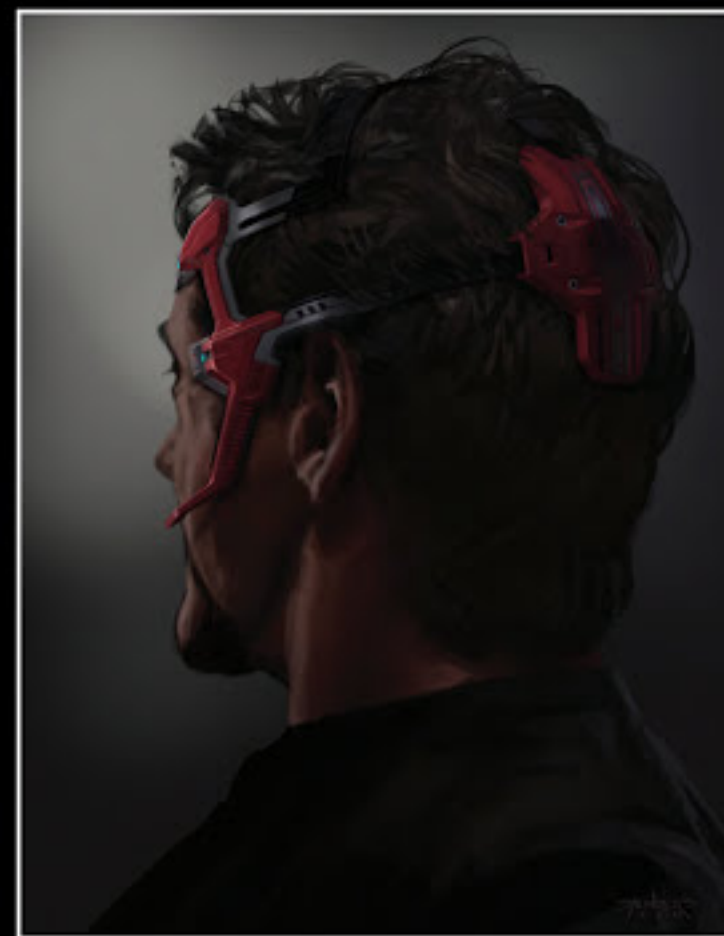


SIDE VIEW

AUGMENTED COGNITION HEADSET_V6_03-20-12



Phil Saunders concept art with production still.





CHAPTER TWO

SUIT ENVY





Lieutenant Colonel James “Rhodey” Rhodes has a tough role to fill—not just as a high-level military officer, but as Tony Stark’s best friend. Tony isn’t known for following rules, and it’s Rhodey’s job to follow them closely. So Rhodey often must run interference for Iron Man, sometimes defending him to Congress or using his authority to clear Iron Man’s flights with the military.

In *Iron Man 2*, Rhodey borrowed Tony’s Mark II armor. He weaponized the suit and became War Machine, operating under the direction of the U.S. military.

By the time we see War Machine in *Iron Man 3*, he’s gotten a Stark upgrade and is now, as Digital Sculptor Josh Herman of Marvel Studios’ Visual Development Department says, “sleeker, more refined and athletic in the same way that Iron Man is.”

There’s still a world of difference between War Machine and Iron Man—you can tell at a glance which suit belongs to Rhodey, and not just by the silver color and the swiveling minigun. “War Machine is more angular and military,” Herman explains. “He feels just a little more aggressive—with more plating, more layers, and fewer flowing lines. He’s more square.”

“Square” is probably not how Rhodey would describe anything he wears—though once he’s rebranded as Iron Patriot and painted red, white, and blue, he might actually look the part.

And even with the new paint job, the suits are still—as Rhodey said the first time he got a look at one of Tony’s armors—the coolest thing he’s ever seen.

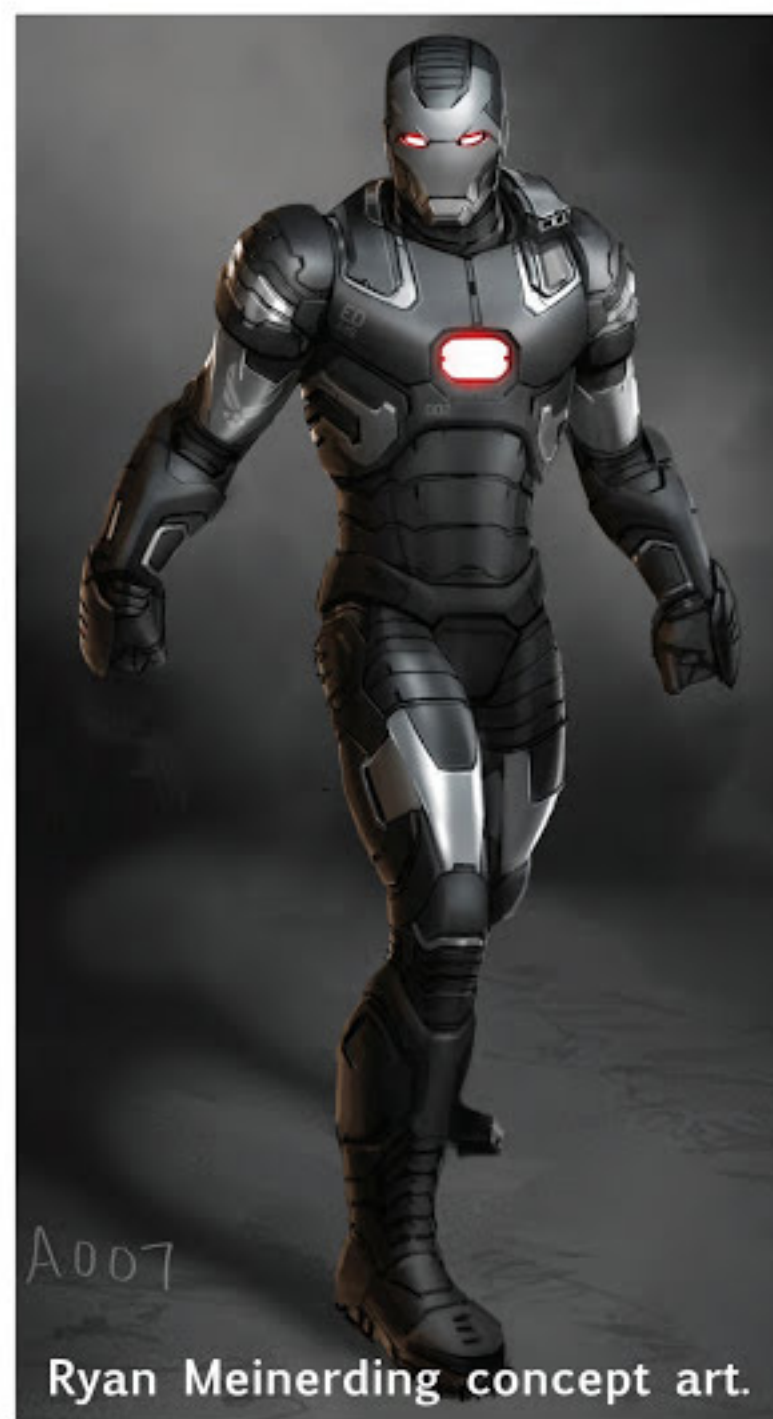
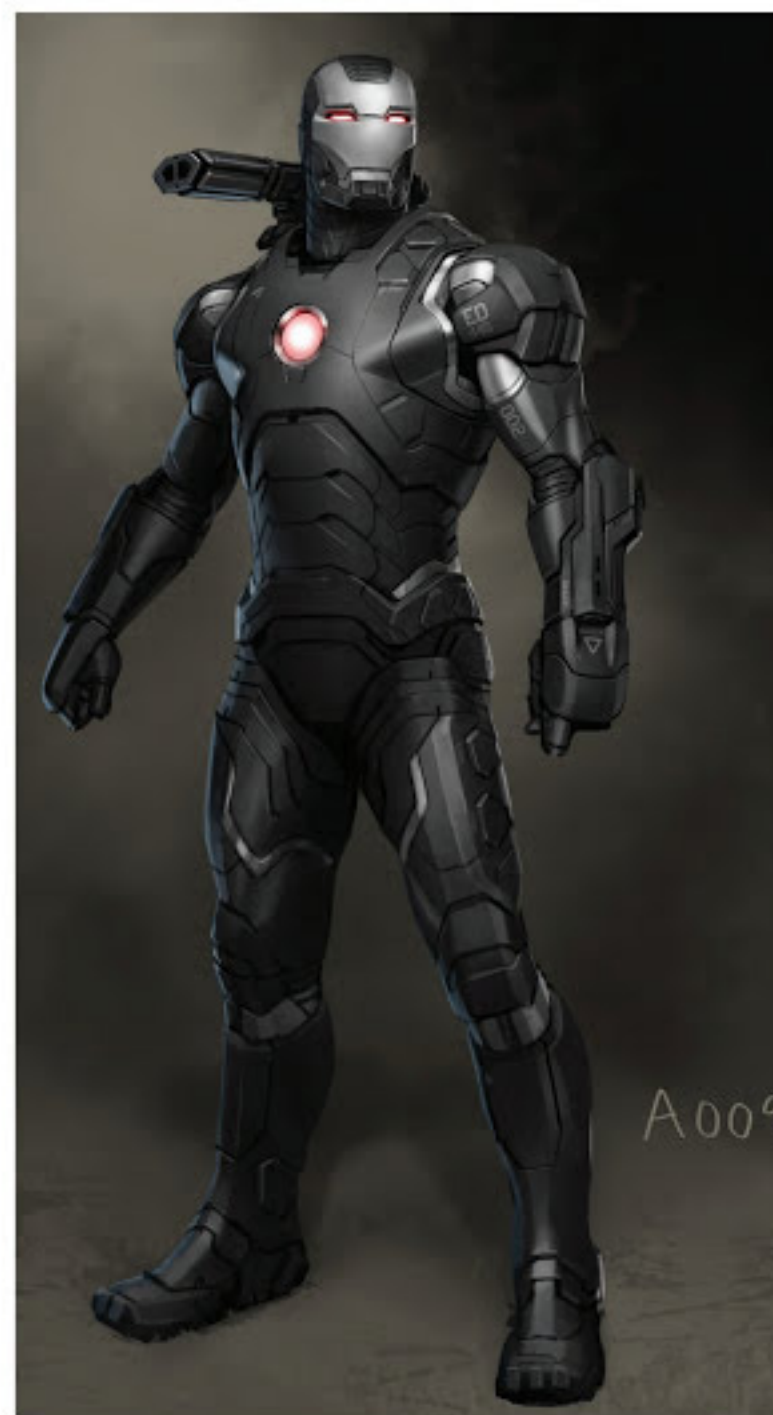


WAR MACHINE



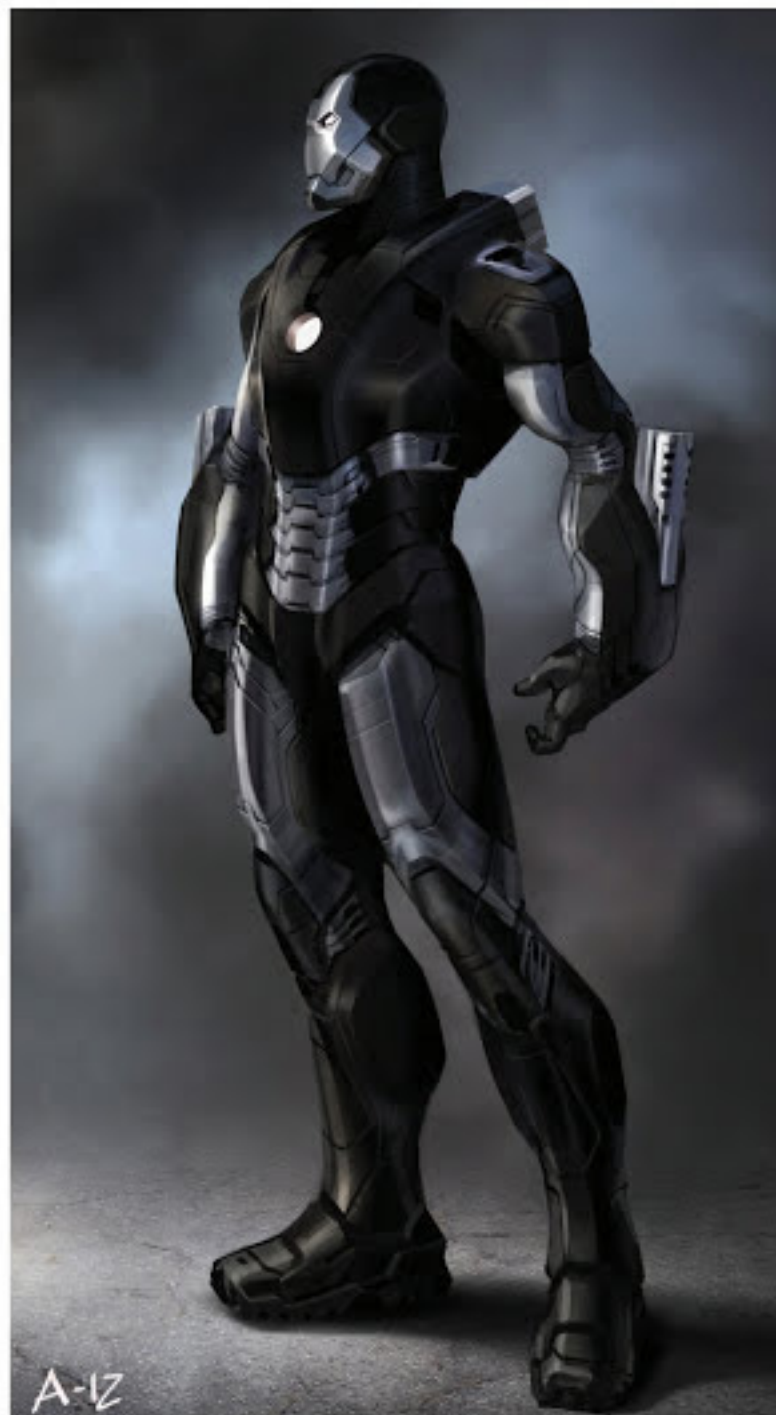
Phil Saunders
concept art.

“Whereas Iron Man is akin to a Ferrari, War Machine is more of a military tank,” says Concept Artist Andy Park, who illustrated an early exploration of War Machine for *Iron Man 3*. “Iron Man’s form language is all about the speed and style—staple qualities of the man that is Tony Stark. Rhodey is the military man that is more about strength and power.”



Ryan Meinerding concept art.

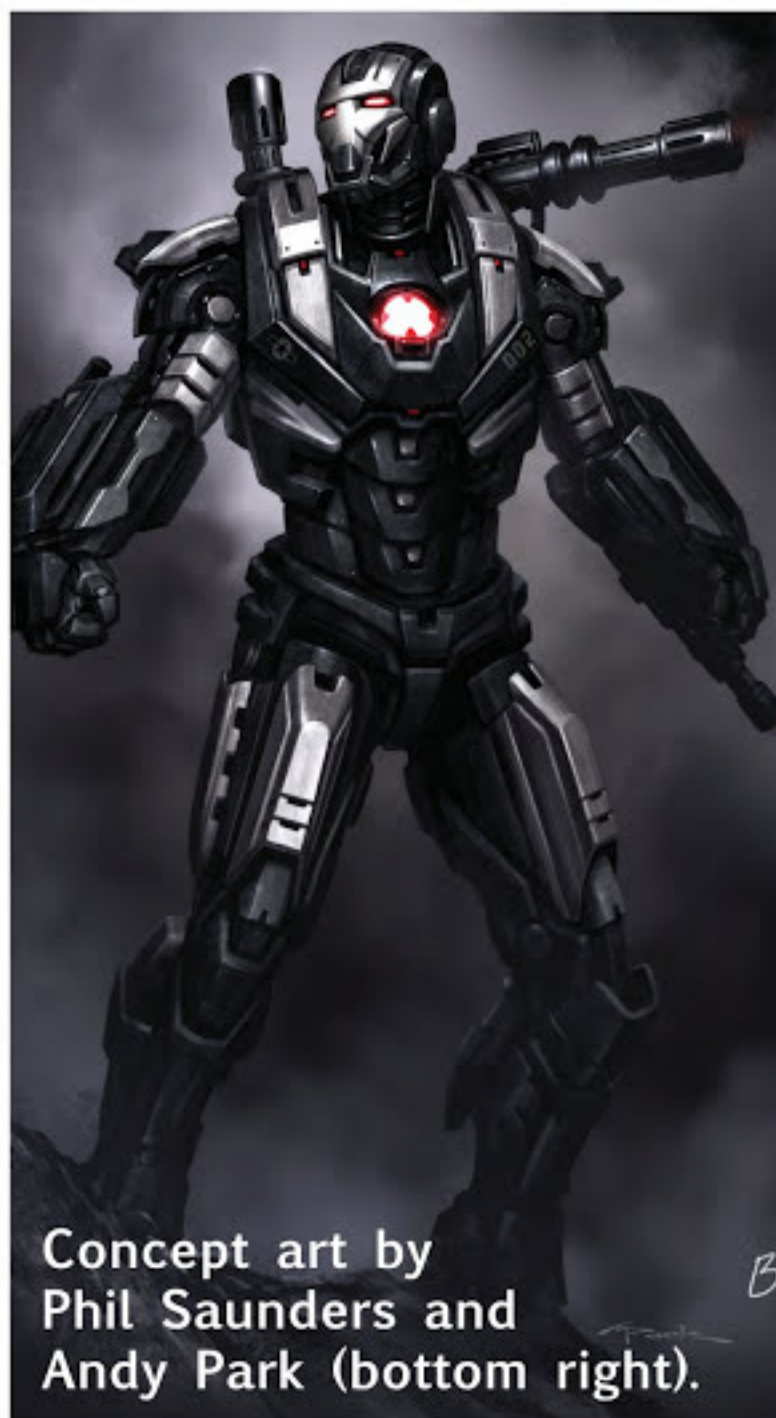




A-12



B3



B

Concept art by
Phil Saunders and
Andy Park (bottom right).

Ryan Meinerding
concept art.



“After we all pretty much unanimously picked Ryan’s design as the best War Machine, it was determined that it could use a little bulking up,” Concept Artist Phil Saunders adds. “So we repurposed the helmet and side intakes from my A-11 proposal, and took from A-12 the strong theme running from the traps through the chest. I worked with Ryan and Josh to blend that back into the chest without losing the strong cylindrical-roll theme at the bottom of the pecs that we all fell in love with in Ryan’s initial concept.”





Studies of the War Machine armor's shoulder mount
by Ryan Meinerding and Phil Saunders.

War Machine
maquettes by
Legacy Effects.





"Phil and I worked on this War Machine suit together," Visual Development Supervisor Ryan Meinerding says. "I did most of the body design, and Phil designed the head. This suit is one of my favorite suits I've worked on for the *Iron Man* movies."

Ryan Meinerding
concept art.





Gun pre-mold still courtesy of Legacy Effects.

Tony and Rhodey meet for a drink at Neptune's Net on the Pacific Coast Highway, leaving their "wheels" out in the parking lot among the motorcycles. These two men operate their lives and suits from very different perspectives: one is all about discipline and structure, while the other is brilliance and improvisation—but one thing they can agree on is that being a hero can be stressful and exhausting. The armors are doing fine—but once in a while, the men beneath begin to fray.

When Concept Artist Rodney Fuentebella created

the keyframe for this scene, he had the challenge of imagining the two armors standing empty, side-by-side, in a public venue. "The Iron Man and War Machine armors had to look secure and only accessible to their respective owners, so I gave them holographic interfaces that would have proximity activation," Fuentebella says.

"I sketched out a couple of variations on how the suits would open up and feel similar to how Tony enters the Iron Man armor yet different from the other suit-up sequences."



Rodney Fuentebella keyframe.

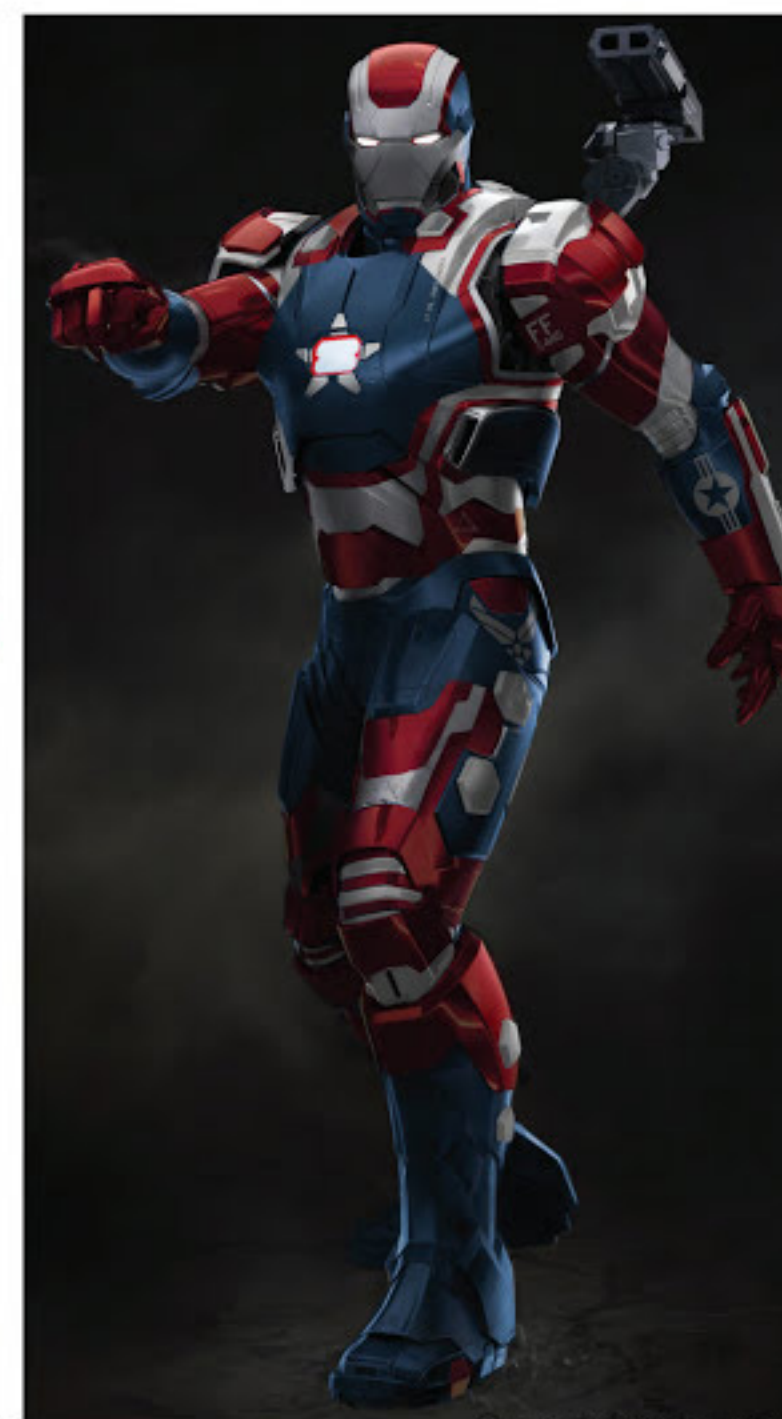
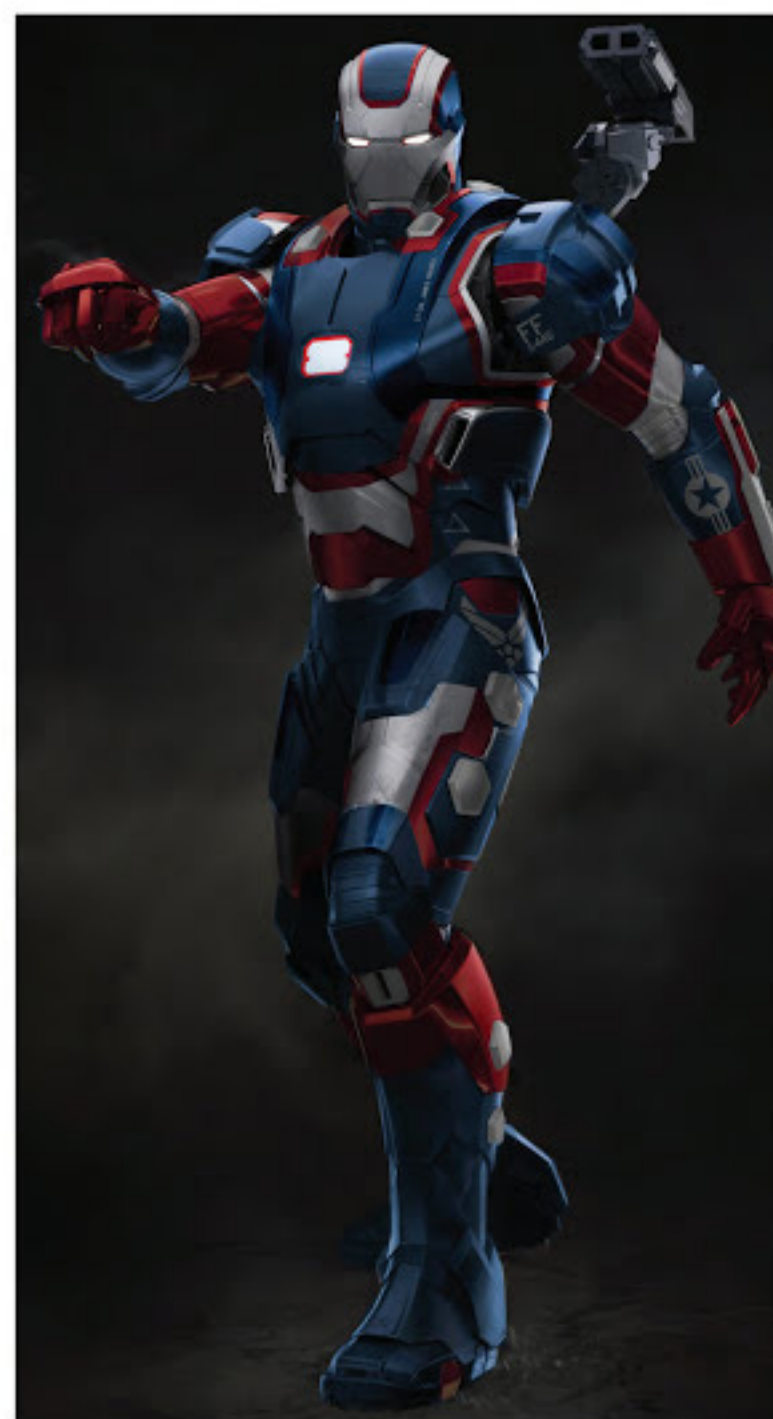
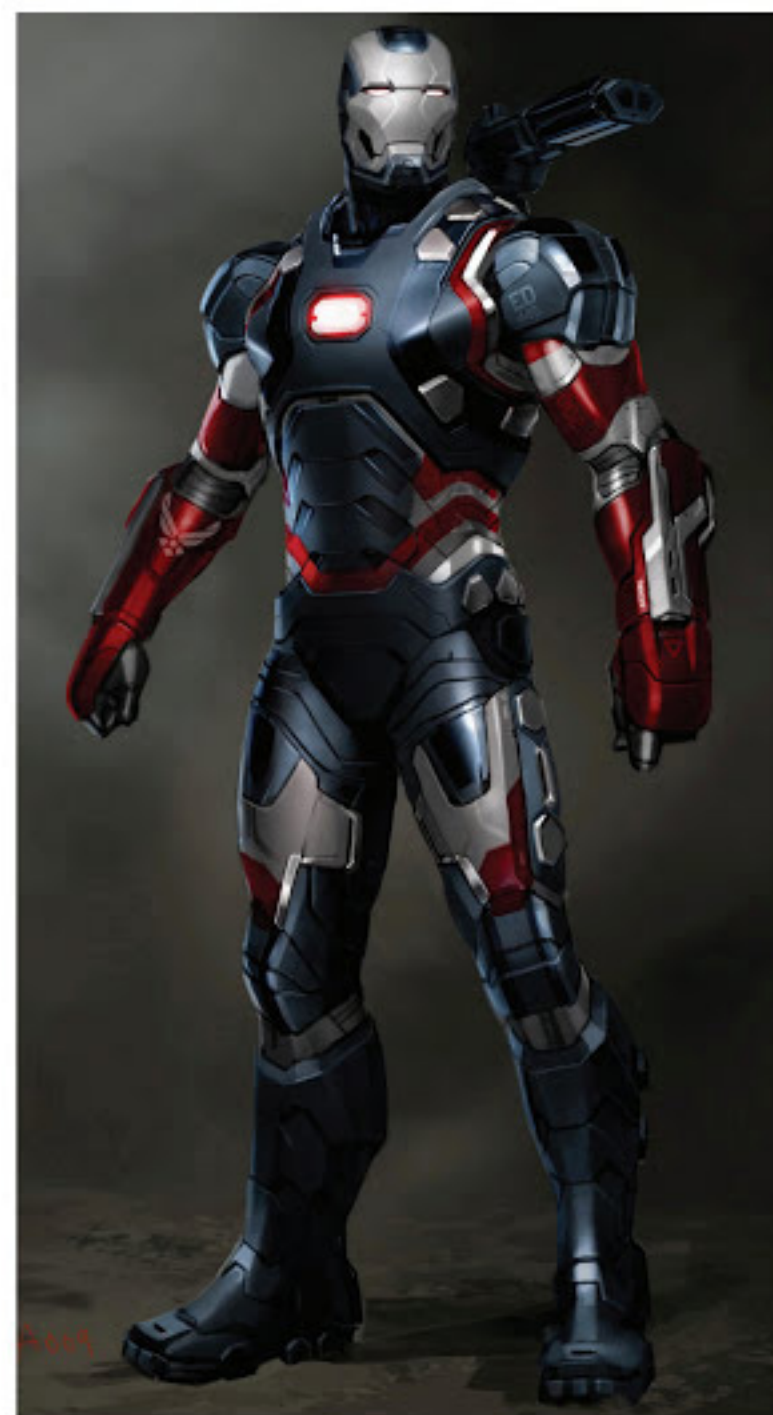


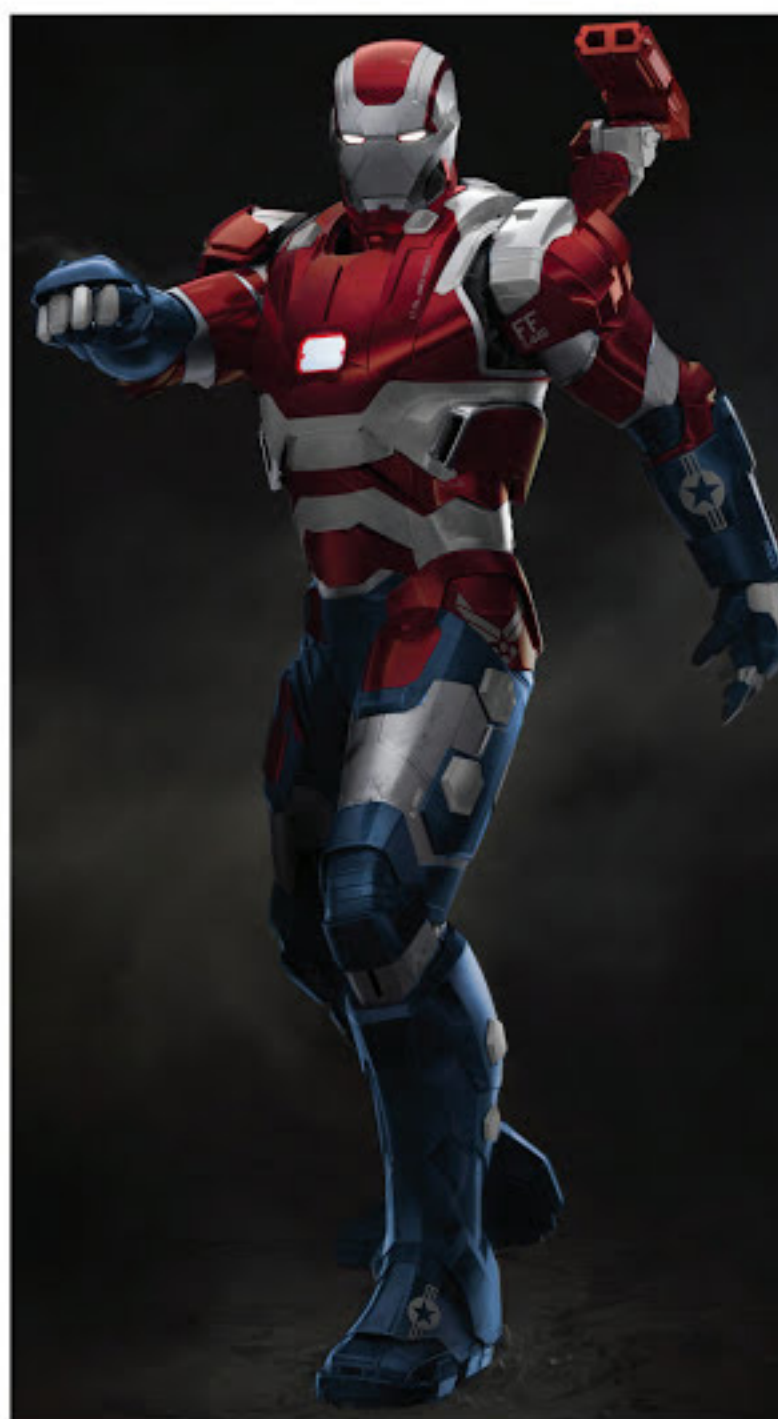
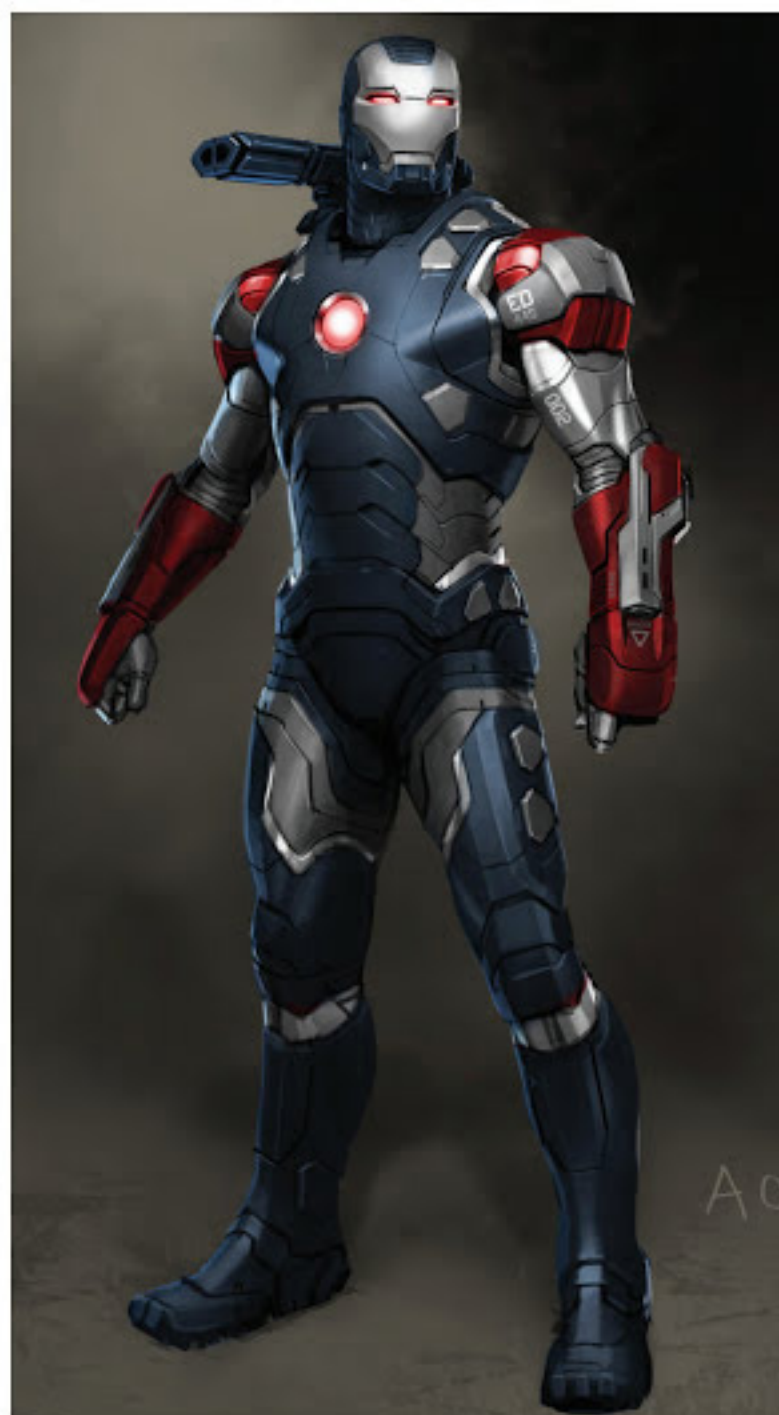
IRON PATRIOT



Ryan Meinerding
concept art.

The original Iron Patriot look had been established in the comics, where the suit was cobbled together by one of the Avengers' enemies in a misguided attempt to inspire the world with a hero reminiscent of both Iron Man and Captain America. "In *Iron Man 3*," Meinerding explains, "someone in the government has taken a look at War Machine and said, 'I can make that better, more patriotic.'"





“We did try and do versions that were a little more inherently about comedy,” Meinerding adds. “But we found that if we actually went about it as if someone was trying to make a cool-looking Iron Man suit into something patriotic, there was enough comedy even if the suit looked pretty cool.”



“The War Machine and Iron Patriot are essentially the same design of armor with different paint jobs,” says Lindsay MacGowan, Effects Supervisor at Legacy Effects. “When we got into the physical build of the suits, we invited Ryan and Phil to the studio to go over the different paint tests that we did to find a color that matched the designs as closely as possible.” After film tests are done, “a choice is made by the team as to which shade of red or blue is to be used for each particular area of each suit.”



Ryan Meinerding
concept art.



Ryan Meinerding concept art with production still.



CHAPTER THREE

THE IRON MANSION





Ever since he fought off an extraterrestrial invasion with the Avengers in New York, Tony has worried about his ability to protect not just humanity, but also Pepper and the things most dear to him. He's been working, building, and tinkering in his workshop under his mansion—in part because he's Tony Stark and that's what he does, but also as a way to handle the stress and anxiety that come along with his new self-awareness and responsibility. He's thrown himself into his work.

"There's a funny scene with Pepper Potts, played by Gwyneth Paltrow, where Tony's in his suit and she says, 'What is that, Mark VIII or VIX?' And he looks down at his arm and it's Mark XLII and he says, 'Oh, yeah,'" says Louis D'Esposito, Executive Producer and Co-President of Marvel Studios.

And all these new suits must be stored somewhere. "Tony builds a

subbasement to the basement," D'Esposito continues. "And it's actually a wine room, and it's circular—I don't know how many bottles are there—but there's a metal cylinder in the middle."

That metal cylinder holds 30-40 new armors, safe from view and attack. That turns out to be a good thing later, after Tony—who for all his brilliance is not known for his humility—angrily challenges his enemies on international television, daring them to come to his Malibu house and get him. It doesn't occur to him that someone might actually have the firepower to do it.

Tony's public dare goes wrong, and then he doesn't just stumble. He loses his mansion—home to his workshop, his Iron Man suits, his partner Pepper Potts, and his most valuable, top-secret technology.

But he still has his wine cellar.

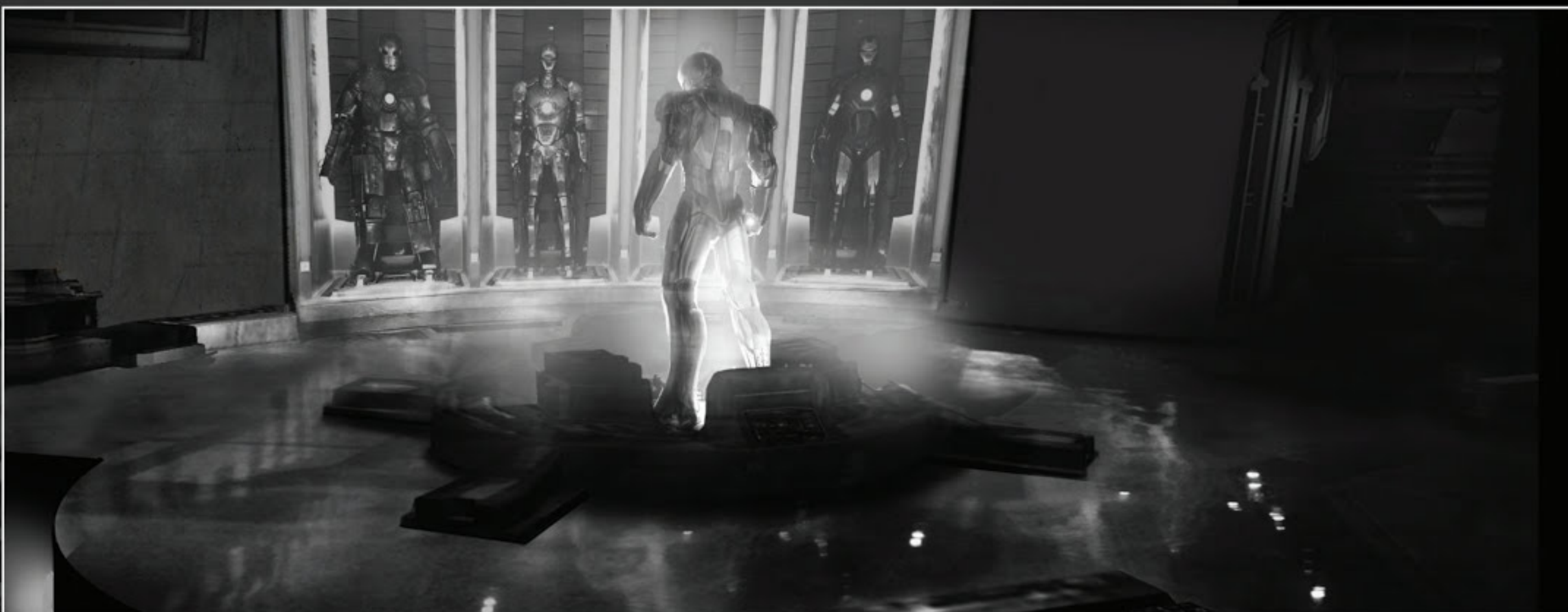


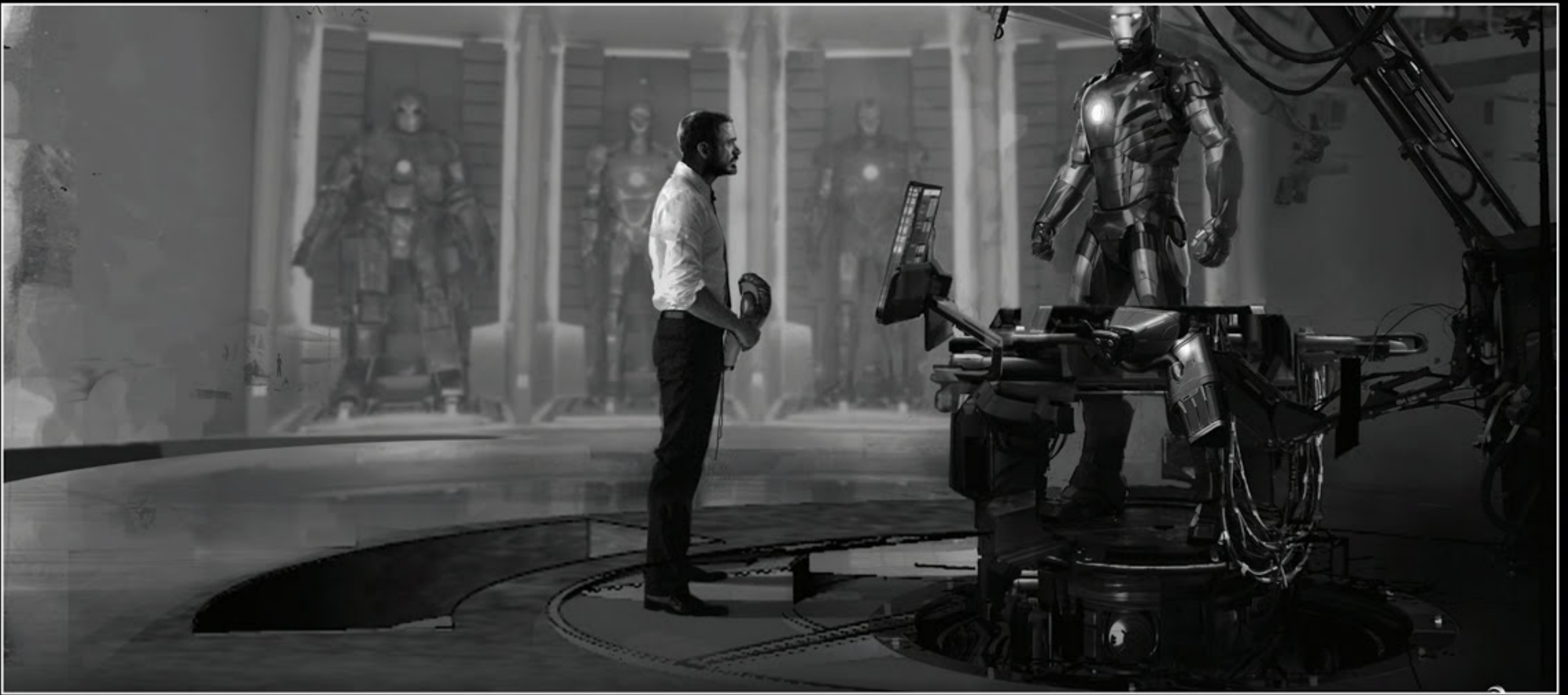
TONY'S MALIBU MANSION WORKSHOP

A black and white concept art illustration of Tony Stark's Malibu mansion workshop. Iron Man stands on a circular, multi-tiered hydraulic lift platform. The workshop is filled with various mechanical components, tools, and equipment, creating a high-tech industrial environment. A bright light source in the background illuminates the scene, casting long shadows and highlighting the metallic surfaces of the armor and machinery. The overall atmosphere is one of a sophisticated, hidden lair.

Concept Artist Rob McKinnon was tasked with sketching ideas for Tony's workshop, hidden deep in his Malibu home. These gantry elevator systems—hydraulic lifts for the armors—were intended to illustrate potential ways of integrating the movement of the Iron Man suits between the workshop and the wine cellar.

Rob McKinnon concept art.





Rob McKinnon concept art.



Rob McKinnon concept art.

TONY'S MALIBU MANSION: THE WINE CELLAR



Rob McKinnon concept art.



Tony had hidden his armors deep in the Malibu mansion's wine cellar. "Stark has summoned his army of suits to assemble for combat," Rob McKinnon says. "This was just a rough sketch of them flying out—I ran out of time before I could add the surprised construction and cleaning crews."





ALTERNATE SUITS



“The mandate was to create not just one armor, but a whole slew of armors that were going to appear in the movie,” Concept Artist Andy Park recalls. “The Visual Development team consisted of

six artists, and we spent a good month designing as many armors and armor types as we could with no real restrictions. We were in designer heaven.”

Josh Nizzi concept art.

MARK 17
"HEARTBREAKER"
ARTILLERY-LEVEL
RT SUIT



MARK 25
"THUMPER"
HEAVY-CON-
STRUCTION SUIT



Rodney Fuentebella, Concept Artist: "The Thumper is Tony's rough and tough 'blue-collar' suit. When designing it, I latched on to the idea that Tony has a workingman's soul. I was inspired by construction equipment and how it's designed to do manual labor. The Thumper suit is a side of Tony's ego that is raw, tough as nails, and gets the job done."



Rodney Fuentebella concept art.

MARK 15
"SNEAKY"
STEALTH SUIT



Phil Saunders
concept art.



Josh Nizzi
concept art.



MARK 39
"GEMINI"
SUBORBITAL SUIT

Josh Nizzi, Concept Artist: "The deep-space suit has small boosters all over the body, which control movement in zero gravity. Sections of heat-resistant tiles protect the suit during re-entry and make for a nice contrasting material. The gold-plated visor used by astronauts works perfectly with the iconic gold Iron Man face. Early versions of the deep-space suit had very large detachable booster rockets; these got refined into a removable integrated backpack. We referenced materials and colors used in NASA vehicles and suits."

DEEP SPACE SUIT BACK
JOSH NIZZI
03.14.12



SUIT V10

MARK 33
"SILVER CENTURION"
ENHANCED-ENERGY SUIT



Andy Park concept art.



Park: "The Silver Centurion was the design I was obsessed with as an adolescent. *Iron Man #200* got me into comic books. I actually stopped collecting the book when the Silver Centurion armor got destroyed and he went back to the old red-and-gold color scheme. The hardest part to pull off was the drastically different bullet-head shape he had in the comic book."

the comic book.

MARK 35
"RED SNAPPER"
DISASTER-RESCUE SUIT



Josh Nizzi concept art.



Nizzi: “The Red Snapper suit is stronger, larger, and more heavily armored than other suits—but lacks maneuverability, flight, and weapons. Unique to the Red Snapper are the powerful extendable claws that can reach out and crush just about anything. The repulsors mounted in the claws can create concentrated spheres of energy and then explode them.”



MARK 37
"HAMMERHEAD"
DEEP-SEA SUIT

Phil Saunders
concept art.



Phil Saunders, Concept Artist:
"Based on a design I initially proposed
for deleted scenes in the first Iron Man,
the deep-diving suit was designed to work
under the extreme pressures of the furthest
depths of the ocean. What it loses in range

of motion and maneuverability, it gains in
incredible strength and near-invulnerability.
It's effectively a wearable submarine, with
the ability to extract oxygen from water for
both long-term submersion and buoyancy
control."

SAUNDERS
2012

IRON MAN

DEEP DIVING SUIT
PHIL SAUNDERS
5/22/7

Phil Saunders
concept art.



Ryan Meinerding
concept art.



MARK 41
"BONES"
SKELETON SUIT

MARK 38
"IGOR"
HEAVY-LIFTING SUIT



Ryan Meinerding, Visual Development Supervisor:
"Shane Black had the idea early on to have a hunchbacked
suit, and the design lent itself to be a heavy-lifting cargo
suit that carried loads on his back. While Igor is not built
for Hulkbusting, he is evidence that Tony is thinking about
building larger and more powerful suits."

Ryan Meinerding concept art.



MARK 16
"NIGHTCLUB"
BLACK STEALTH SUIT



Andy Park
concept art.



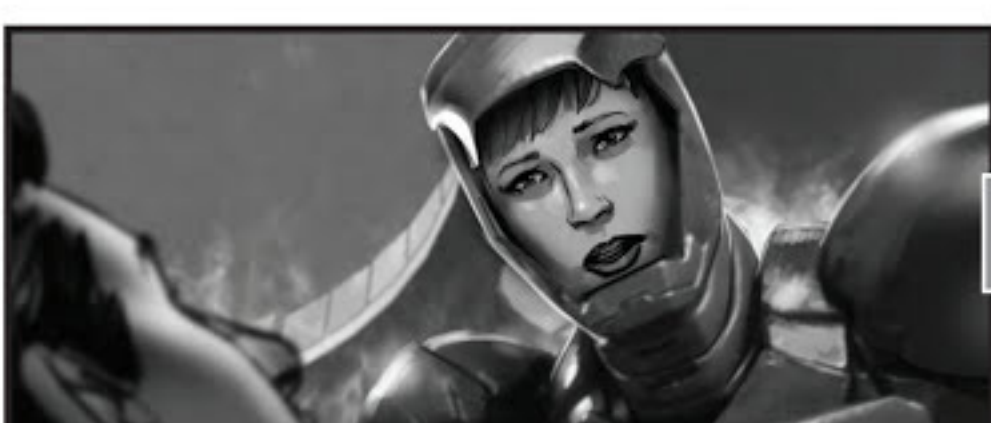
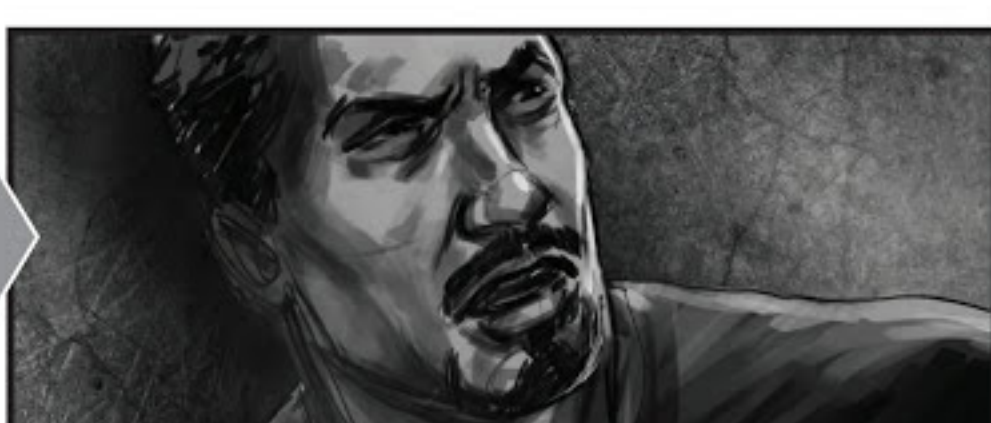
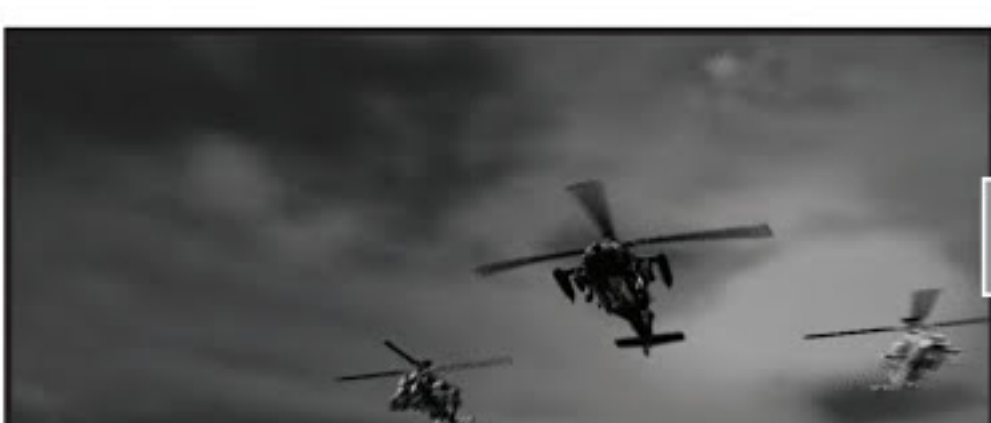
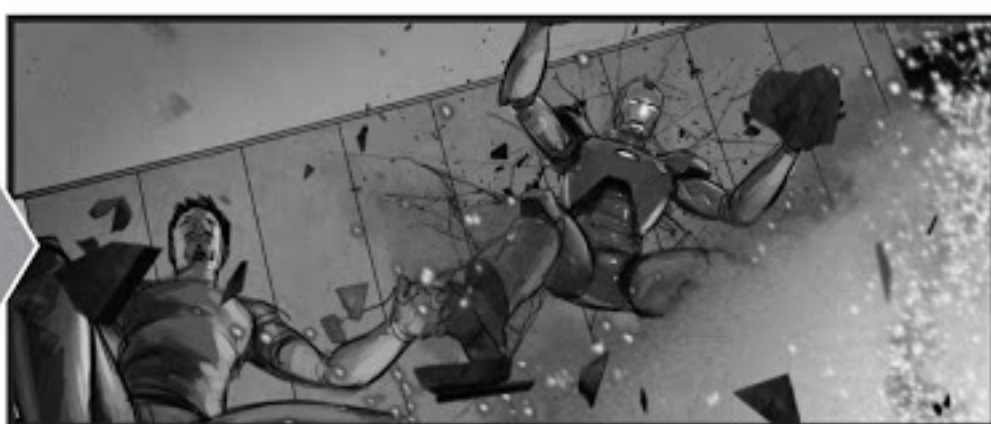
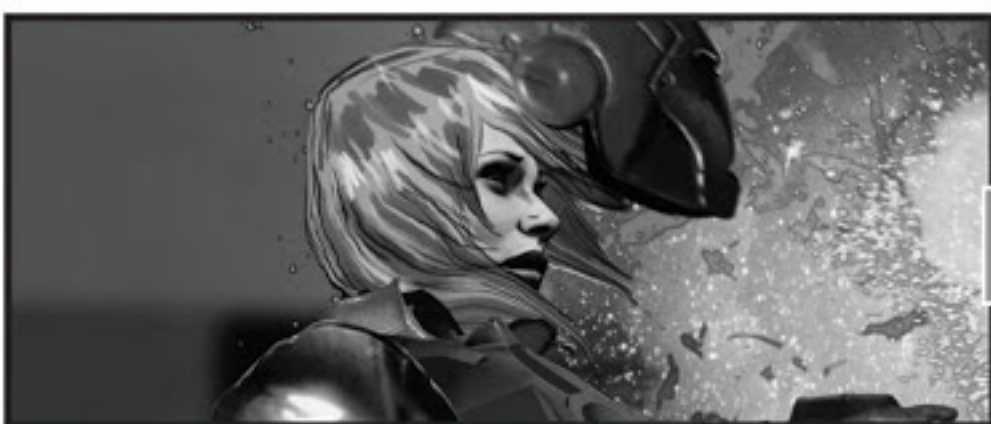
Park: "If the Silver Centurion suit was the souped-up version, the Black Stealth suit is the trimmed-down, agile version. It is essentially his ninja suit down to the absence of a mouth, revealing only the eyes."

ASSAULT ON TONY'S MANSION: STORYBOARDS



"From the first moment I was asked to work on this sequence, I knew that meeting the lofty expectations bestowed upon me by Shane and Marvel was going to be one

of the greatest challenges of my career," Lead Storyboard Artist/Animatics Supervisor Federico D'Alessandro says.







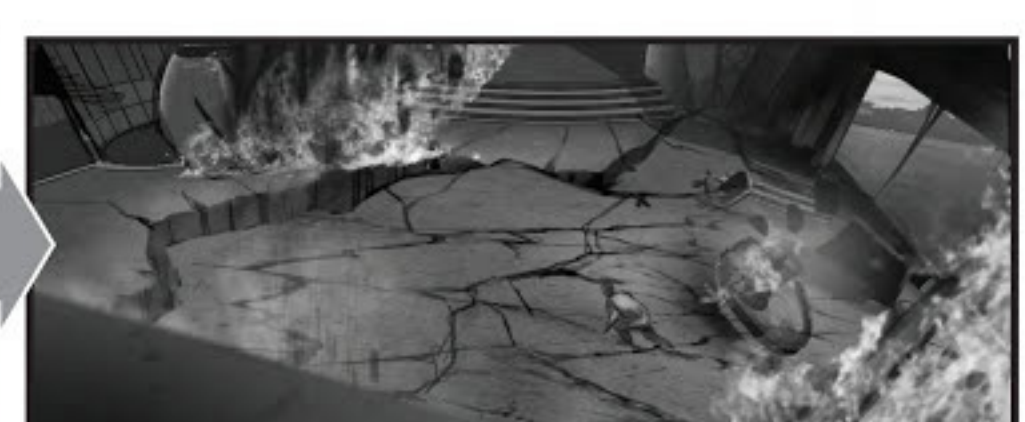
D'Alessandro: "From our initial conversations, Shane and I decided on a few things: The action had to be dynamic and brutal, with plenty of reversals. The scene also needed to show how fast Tony thinks on the fly. His brain processes information like a supercomputer, and he's usually several moves ahead of his opponents. That means that when he performs an action, it needs to not only solve the immediate problem, but also simultaneously set himself

up for his next move, which is then complicated by the bad guys' actions—forcing Tony to improvise a new tactic. This 'tit-for-tat' method of storytelling is something that Shane and I really subscribe to. It's an enormous creative challenge to build a sequence this way, but when done right it's a technique that can elicit that roller-coaster-ride feeling that a good action scene gives you."







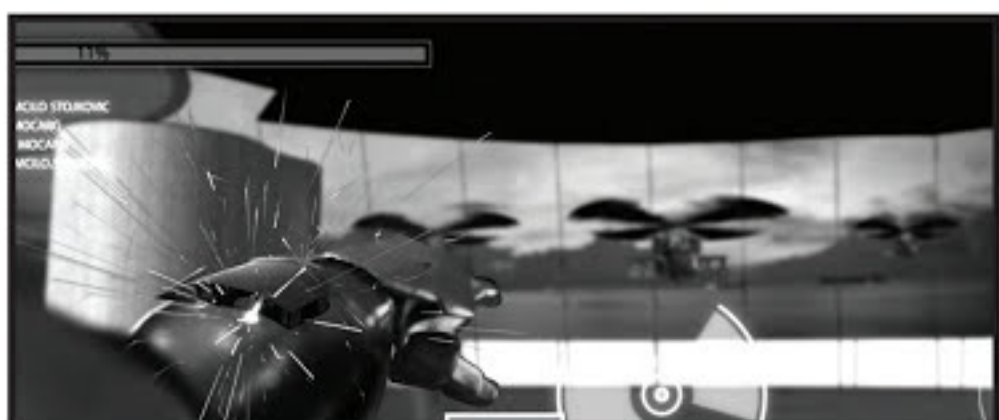


Visual Effects Supervisor Chris Townsend recalls the challenges of shooting this scene: “Initially, it was clear we were going to have to take helicopters with doors that open, and with armaments and weaponry, then fire into Tony’s house at Point Dume, then have the house cascade down a very steep cliff into deep, deep water so that we could tell the story that Tony was being dragged down almost off the edge of the continental shelf.

“There were several issues with that concept. One: trying to physically build that helicopter and actually make it flight-worthy and legally allowed to fly. Not possible with our resources. Okay, so the helicopters have to be computer-generated. Two: We want to shoot the house on the hillside. Obviously, the house doesn’t exist, so the house would have to be computer-generated.”

rodney.f

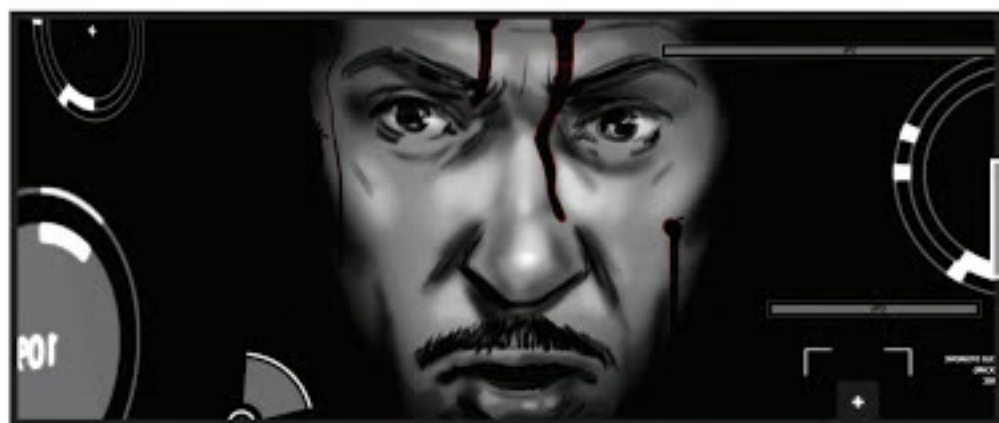
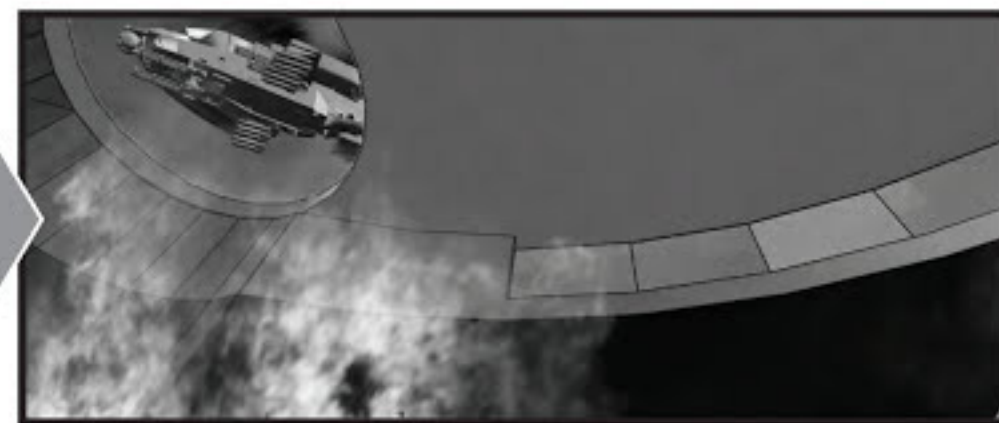


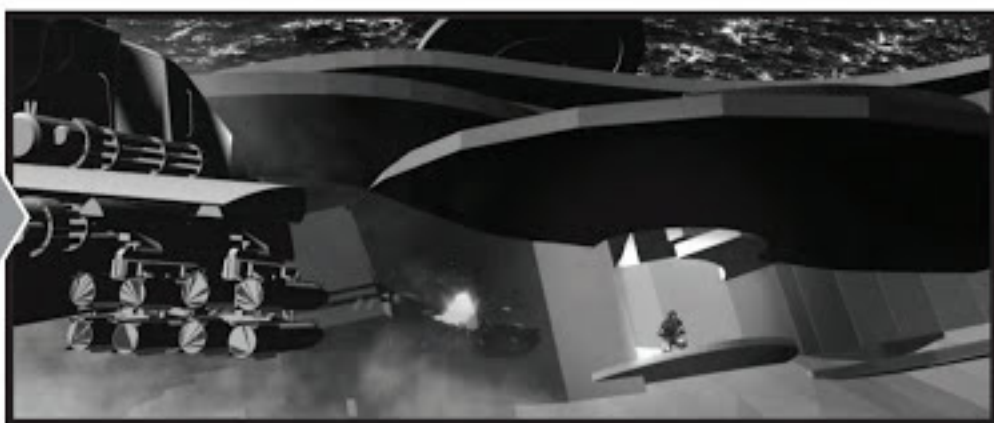




Townsend: "And then we said, let's shoot Point Dume as our location. Unfortunately, you can't actually shoot Point Dume as Malibu has a new ordinance that you can't fly within a certain distance of the environment. So we couldn't actually shoot Point Dume."











Townsend: “We needed to reshape the cliffside of Point Dume, anyway, because we needed a steep drop-off. And the coastal environment underneath wasn’t right—because in reality, Point Dume is a shallow, little rocky cove. So we couldn’t actually use that. We ended up saying, ‘Well, if we can’t shoot the environment, and we don’t have a house, and we don’t have a cliff, and we don’t have water, I guess it will all have to be CG.’”

Rob McKinnon concept art.



TONY FALLS THRU FLOOR...



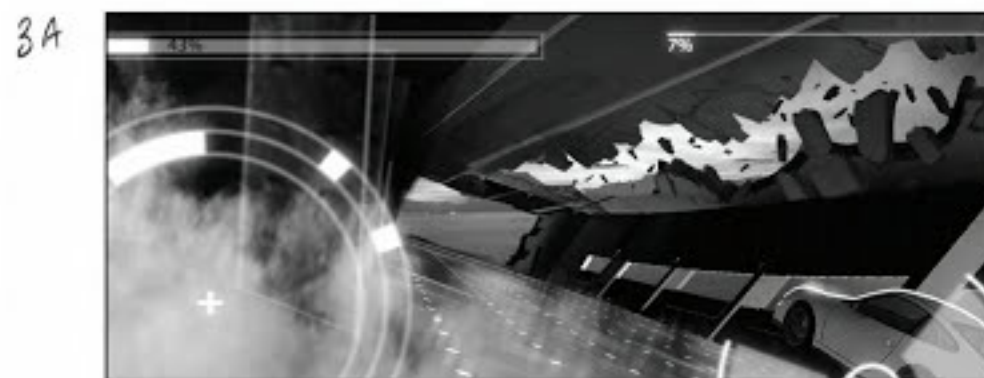
...BOUNCES ON BASEMENT FLOOR...



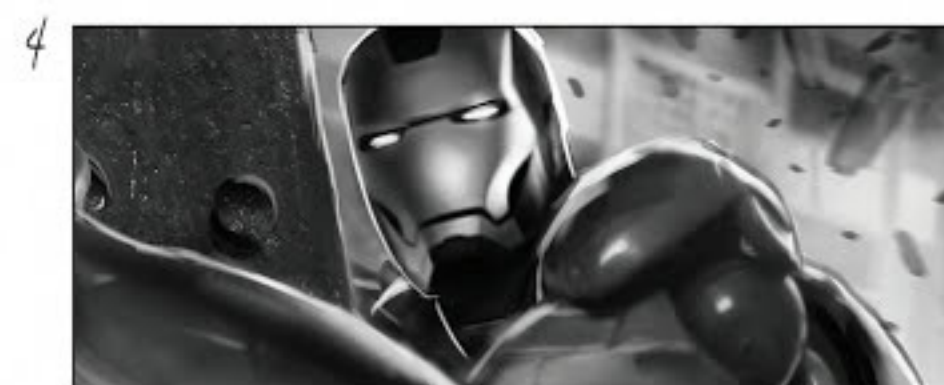
...GRABS ONTO A STEEL



CAM TILTS DOWN WITH TOP HALF OF MANSION CRASHING INTO THE WATER BELOW



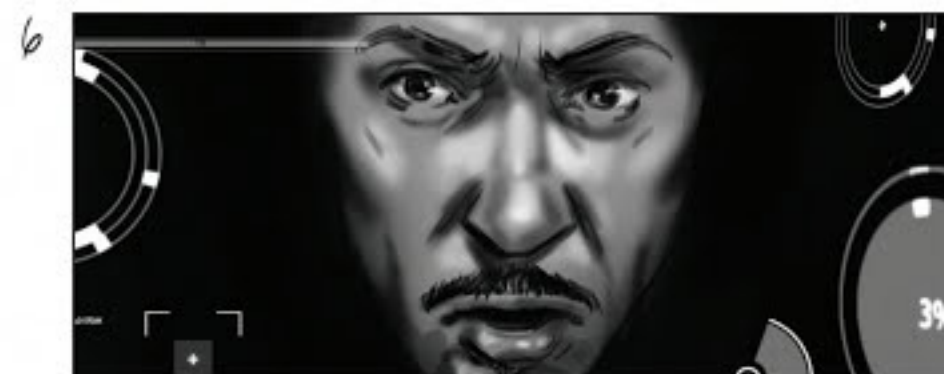
TONY POV - CEILING CRACKING



TONY: "WAIT. THE SUITS. JARVIS, HOW'S DEEP STORAGE?"



JARVIS: "UNAFFECTED AND UNEXPOSED, SIR." TONY: "OKAY, BLOW 'EM."



TONY: "CAN'T RISK THEM GETTING OUT THERE."



TRACK W/ EXPLOSIONS

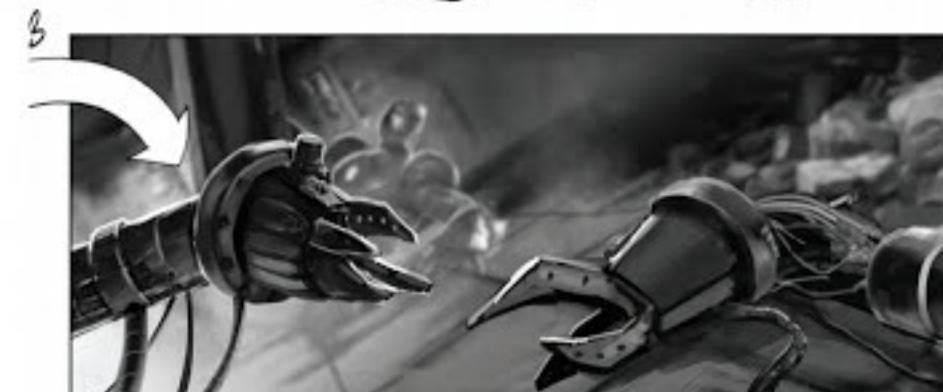


TONY WINCES...

O.S. BEEPING CRY



PULL BACK TO REVEAL...



U BROKEN BODY... DUM-E BENDS DOWN INTO FRAME

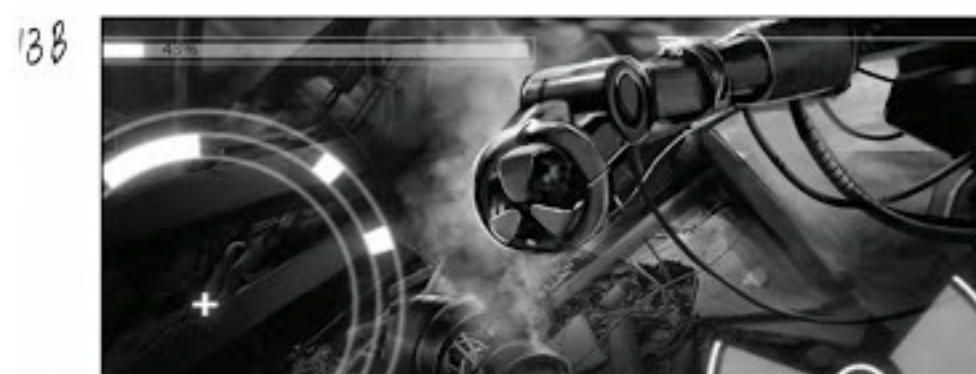




TONY: "IS HE OKAY?"



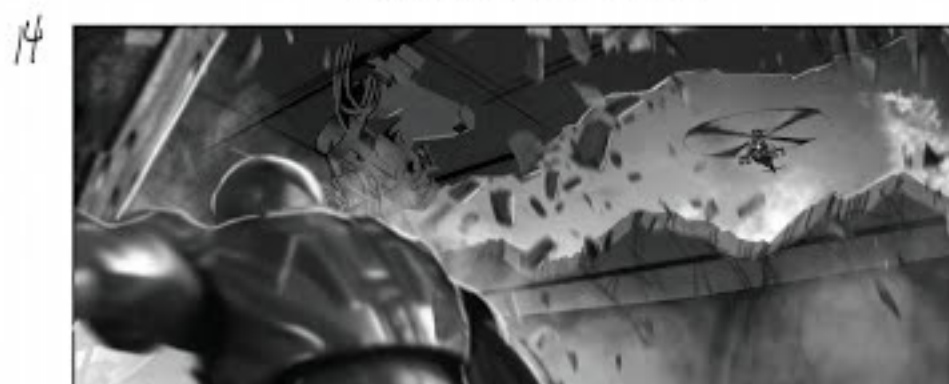
TILT DOWN WITH BASEMENT PLUMMETING



THINK-2. CLAUDE LEECH



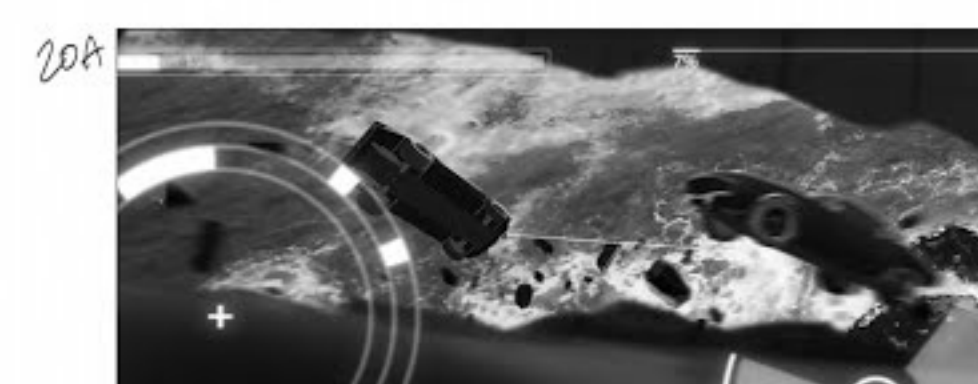
FLOOR CRACKS -



OTS IRON MAN TO CHOPPER APPEARING...



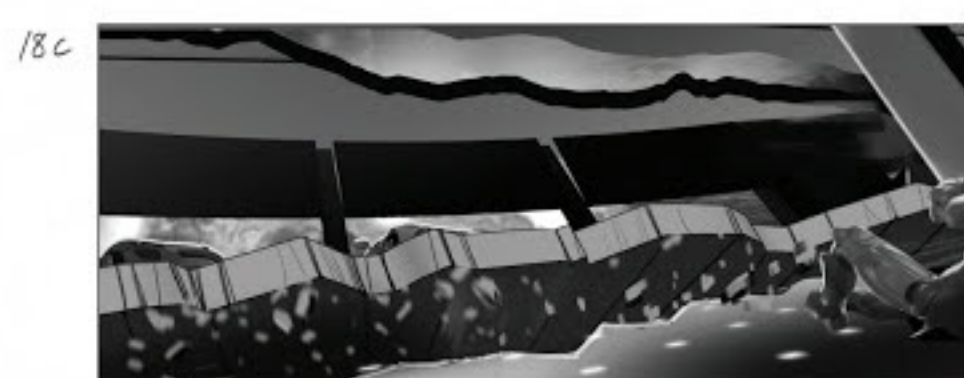
CAM FOLLOWS AS CRACK WIDENS...



TONY POV AS OCEAN RUSHES UP TO WINDOWS...



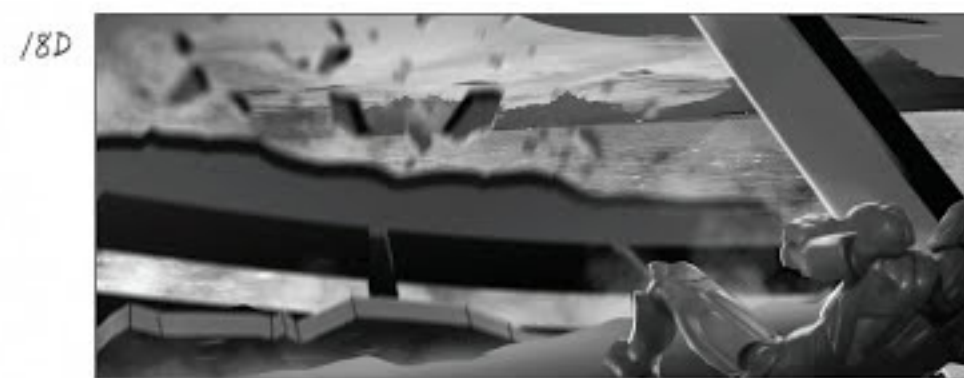
OTS CHOPPER FIRING MISSILES AT HOUSE



...FLOOR TILTS UP...



KADOOSH! WATER BURSTS INTO BASEMENT...



...THE RAPIDE FRONT OF THE BUILDING



WATER RUSHES UP TO CAM...

Townsend: “Everything in the exterior shot of the helicopter—the arrival, the missile, the house collapsing and cascading into the water—is all completely, 100-percent computer-generated. We did take photographs for the distant background stuff—but even the distant environment

was projected onto computer-generated geometry, which was then re-rendered based on the camera. Our skies are based on photographs—but they’ve been manipulated, as well, so that we have a consistency between all the shots.”





The background of the page is a dark, grainy underwater scene. A bright, circular light source, possibly a flashlight or a light from a camera, is visible on the right side, creating a strong glare and illuminating the surrounding water. The water appears murky and filled with small, dark particles or bubbles. The overall tone is dark and atmospheric.

Townsend: “And then we go underwater. Human action, hair, and cloth is really hard to do underwater. But we’ve got an Iron Man—so there’s no point shooting him underwater, either. So the entire underwater scene is also computer-generated. I think there’s one underwater shot where we used a hand against a green screen for Tony’s hand. Other than that, everything is CG.”





POV GOES UNDERWATER



IRON MAN EJECTED INTO UNDERWATER CHAOS



WIDE SHOT BASEMENT PLUMMETING



CAM FOLLOWING IRON MAN DOWN...



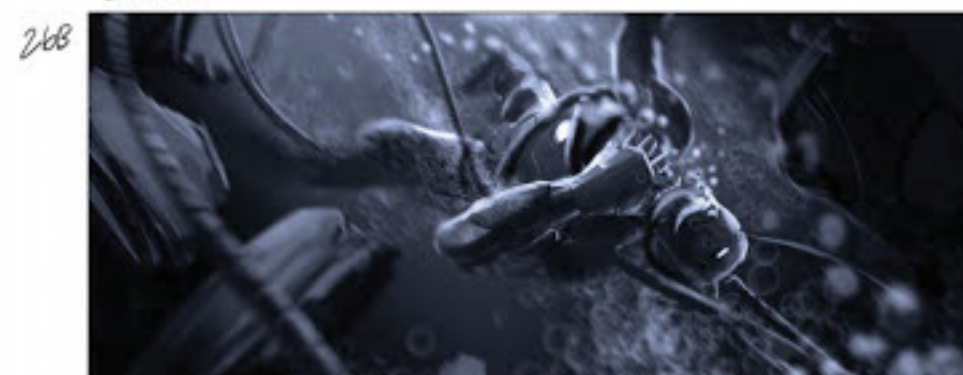
IRON MAN POV - CABLES WHIP AROUND HIM



A CABLE WRAPS AROUND IRON MAN'S NECK



CAM DROPPING DOWN AS IRON MAN PLUMMETS, DRAGGED DOWN BY THE CARS...



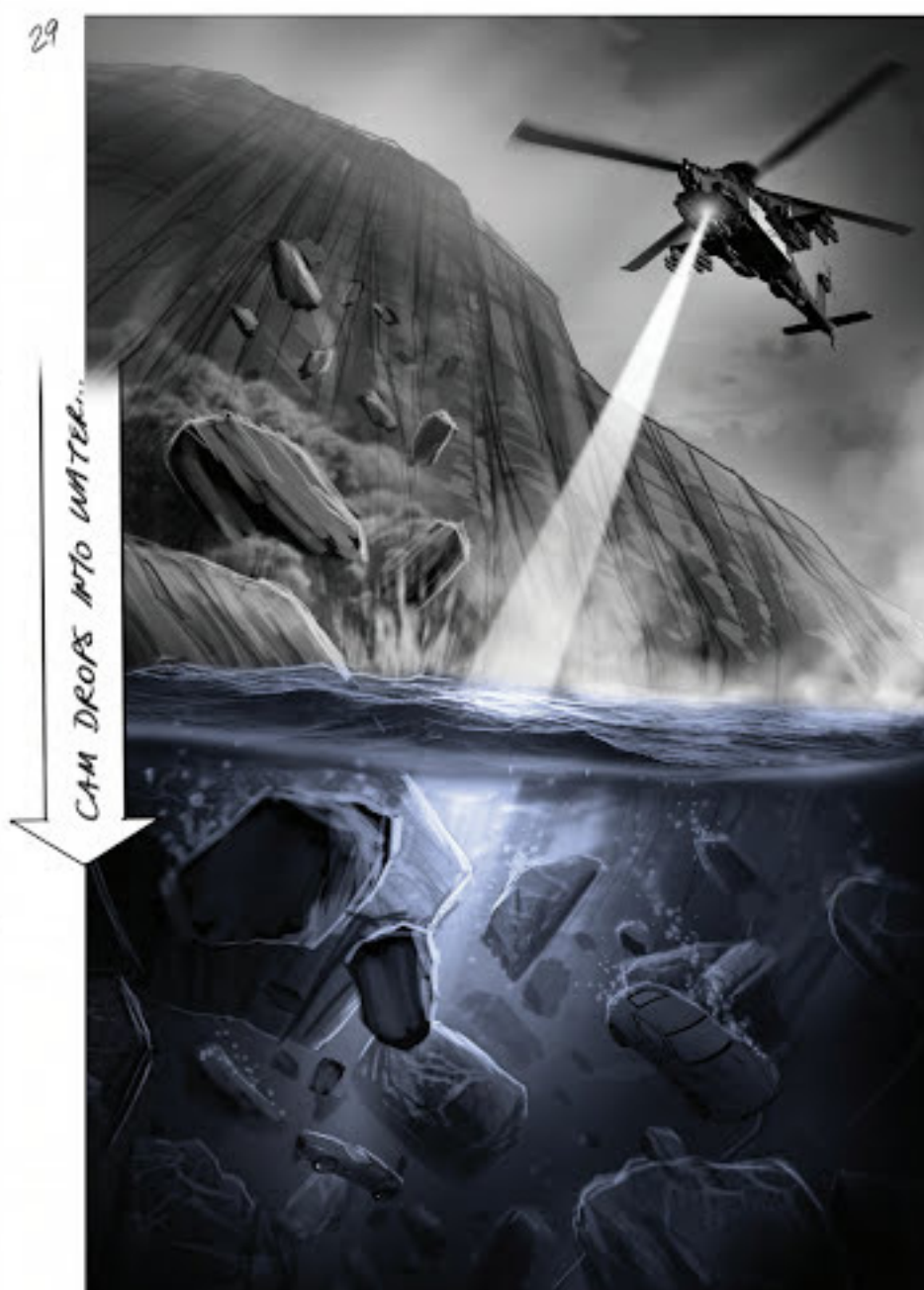
CAM PANS WITH IRON MAN...



... AS HE DESCENDS INTO DARKNESS



IRON MAN POV - DEBRIS FALLING...

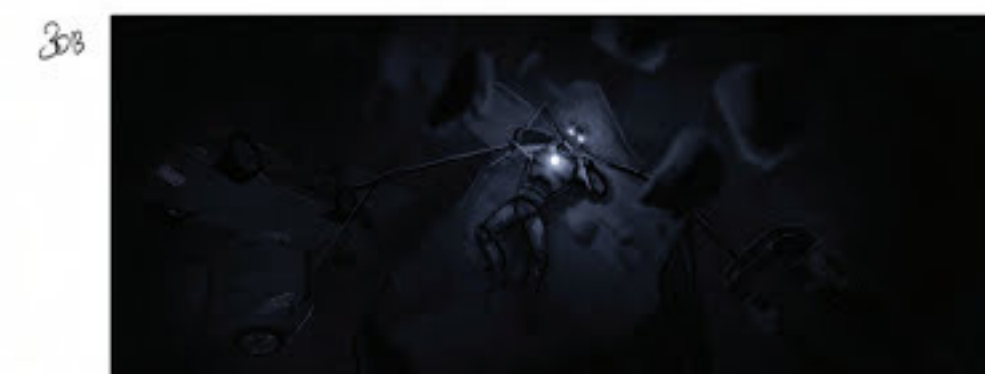


CAM DROPS INTO WATER...

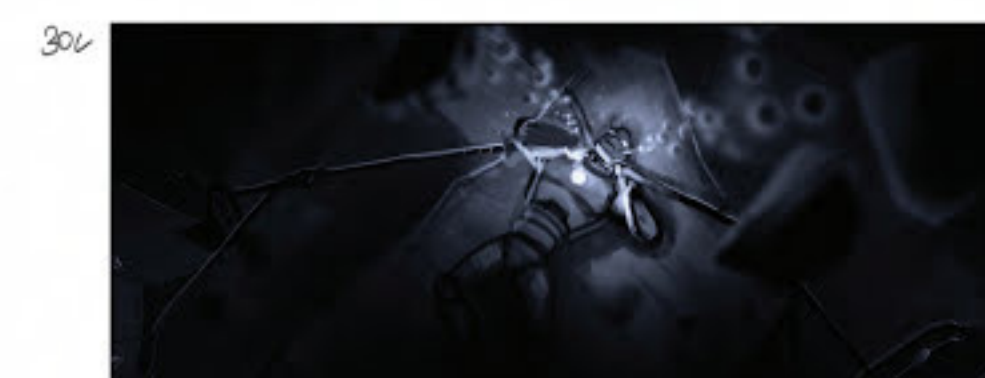
CHOPPER FLIES OVERHEAD, SPOTLIGHT SEARCHING...



CAM PUSHING IN TOWARDS A PINPRICK OF LIGHT BELOW...



... REVEAL IRON MAN, TANGLED IN SOME CABLES...



31



WATER LEVEL INSIDE HELMET RISING...

32



IRON MAN TRIES TO BREAK FREE OF CABLES...

33



CAM TILTS UP TO REVEAL THE BASEMENT
CRASHING DOWN TOWARDS TONY

34A



WIDE SHOT - THE REST OF THE BUILDING ENTERS FRAME...

34B

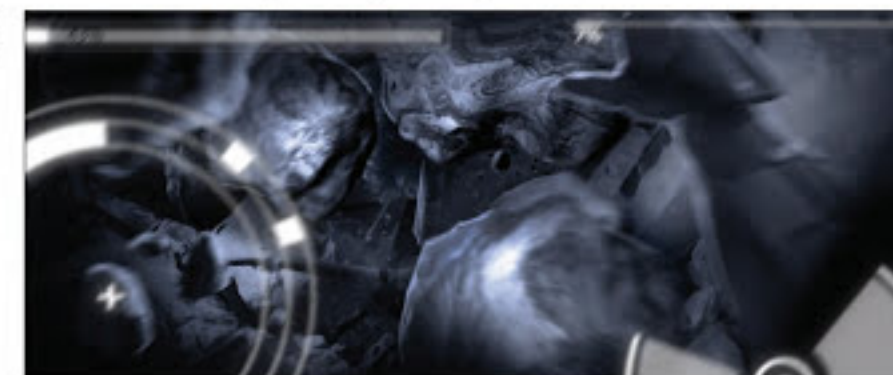


34C



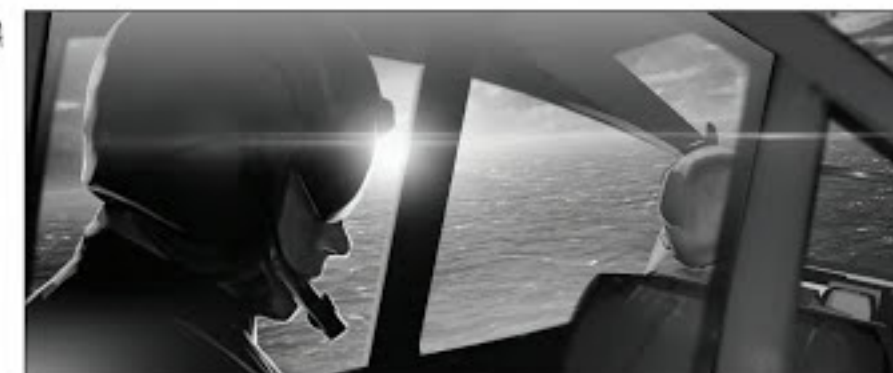
... SMASHES INTO IRON MAN

35



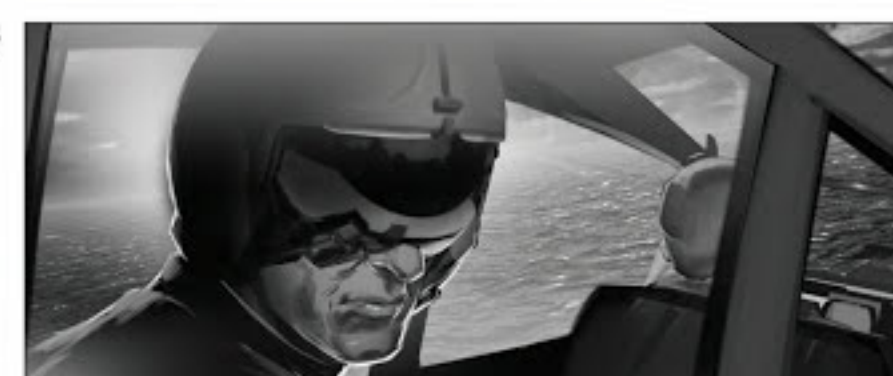
IRON MAN POV - A CHAOS OF ROCKS AND DEBRIS
FILLS HIS VISION

36A



C.U. SAVIN LOOKING OUT THE WINDOW...

36B



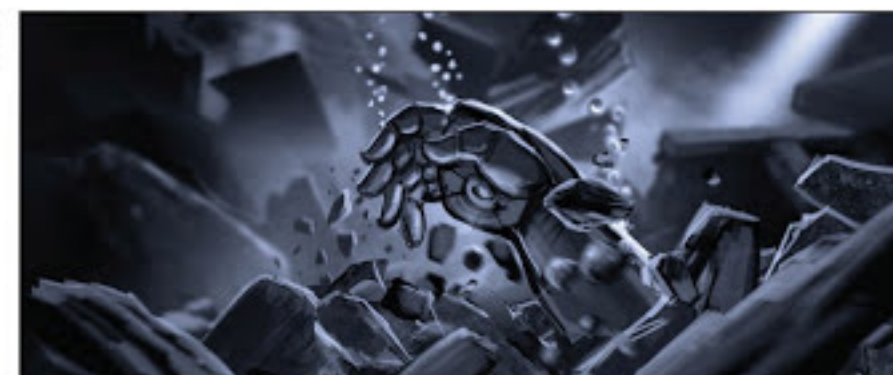
... SEARCHING ...

37A



CAM MOVES ACROSS
UNDERWATER DEBRIS FIELD...

37B



... CAM REVEALS IRON MAN'S HAND STICKING OUT
OF THE RUBBLE ...

38

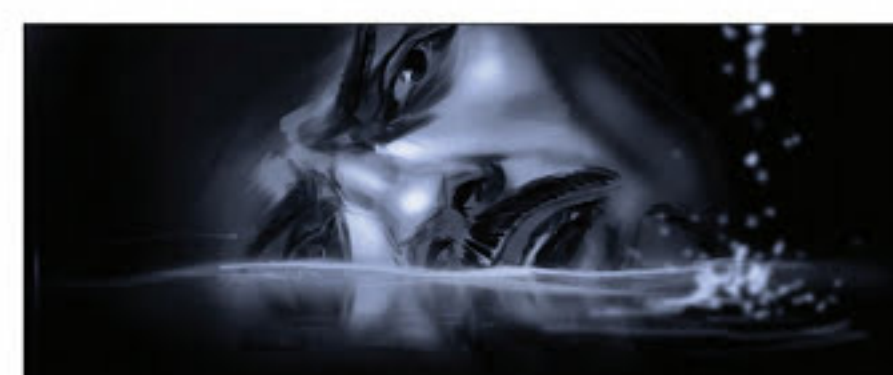


39



IRON MAN BUCKLES UNDER THE WEIGHT OF THE
DEBRIS PILING ON TOP OF HIM

40



JARVIS: "10 SECONDS UNTIL FULL BREACH,"
TONY: "GIVE ME EVERYTHING IN THE GLOVE."

41A



IRON MAN REACHES HAND OUT -

41B



... FIRES THE GAUNTLET AWAY ...

42



HE'S ALMOST FILLING THE AIR ...

43A

CAM FOLLOWS...
GAUNTLET RISING UP...

43B



... TURNS AROUND ...

43C



44A

CAM MOVES BACK WITH
GAUNTLET -

44B



- IT SMASHES INTO THE RUBBLE -

45

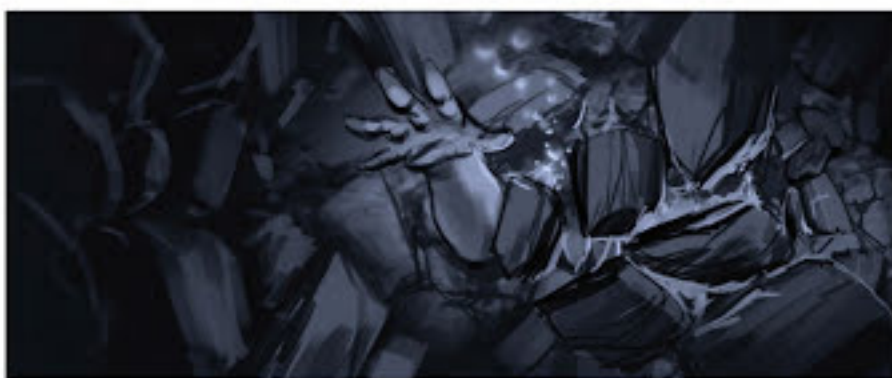


- WIDE SHOT - GAUNTLET DISAPPEARS INTO AIR ...

46A

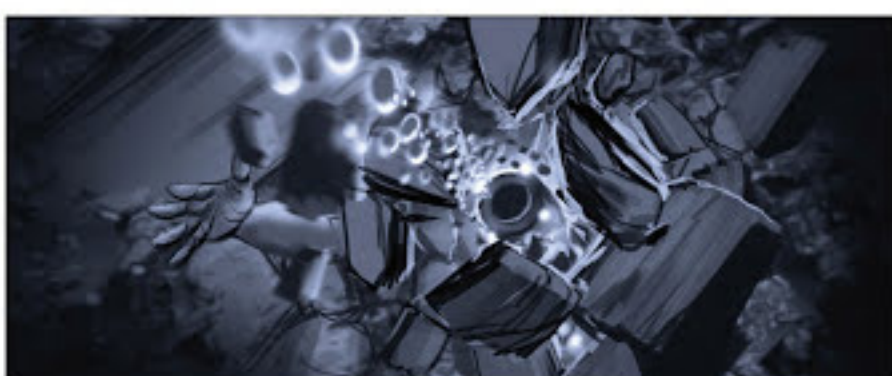
CAM PUSHES IN ON
TONY'S HAND ...

46B



... BUBBLES EMERGE FROM UNDERNEATH DEBRIS ...

46C



46D



... THE GAUNTLET DRAGS IRON MAN OUT.

47A

THE GAUNTLET PULLS IRON MAN OUT FROM
THE RUBBLE ...

47B



... IRON MAN'S HELMET IS VISIBLE ...



IRON MAN POV - WARPED THROUGH WATER IN HELMET ...



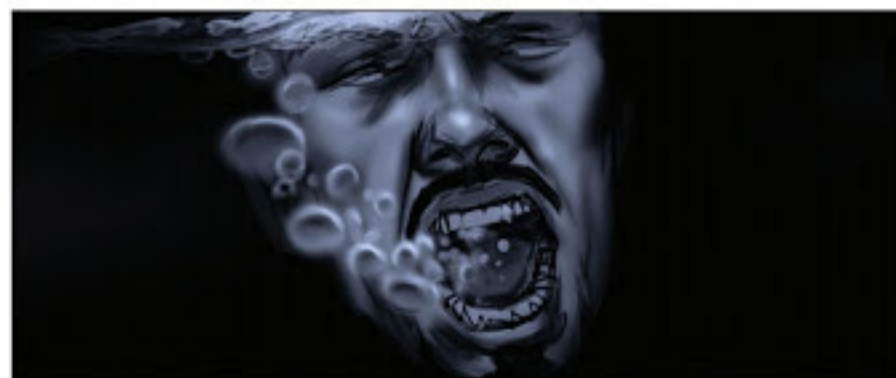
... THE GAUNTLET ENTERS ...

... AND SNAPS BACK DOWN ONTO TONY'S ARM.



... THE GAUNTLET ENTERS ...

49



TONY: "AUTOPILLOT..."

50A



TONY'S POV - DARKNESS CREEPING IN...

50B



TONY'S REPULSORS KICK IN!

51A



TONY RISES OFF THE SEAFLOOR...

51B

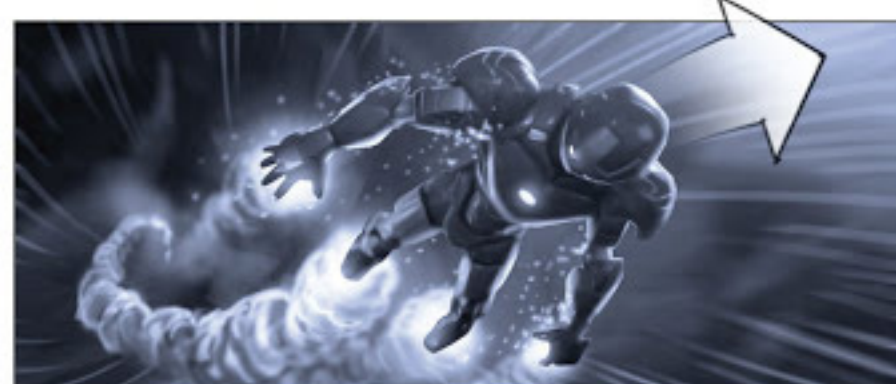


...TONY ROCKET'S UPWARDS

52



53A



CAM MOVES UP WITH IRON MAN AS HE ROCKET'S PAST US...

53B



...CAM PANS WITH IRON MAN AS HE SHOOTS TOWARDS THE SURFACE.

54A



WIDE SHOT - CHOPPER SEARCHING

...CAM PANS RIGHT...

54B



...IRON MAN BURSTS FROM THE WATER -

54C



...AND DISAPPEARS INTO THE STRATOSPHERE.

934

D'Alessandro: "Shane graciously gave me the creative freedom to put my visual storytelling imprint on the scene, as well as come up with original beats. And more than anything else, I wanted to reward that confidence by creating an animatic that he could really be proud of. Shane is one of the greatest storytellers around—talk about having a mountain to climb!"

THE AFTERMATH



Andrew Leung concept art.







Tony's novel solution to keeping Pepper safe during the attack on the mansion presented a new challenge for Legacy Effects: fitting the armor to actress Gwyneth Paltrow.

"Whenever Gwyneth wore the Mark XLII, we ended up using the new 'soft suit' we created for Robert Downey Jr. instead of the harder suits," Effects Supervisor Lindsay MacGowan of Legacy Effects says. "She needed to do certain stunts in it, and this suit was the safest one to wear for those shots."

"She was a little hesitant at first," Lead Suit Coordinator Chris Swift of Legacy Effects says. "But after she was suited up in it, she had a great time and looked awesome in it."

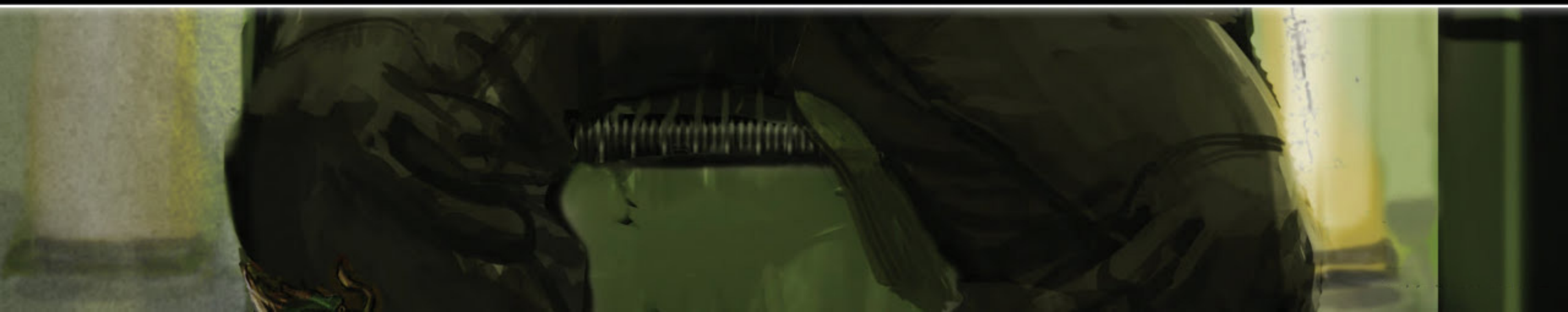


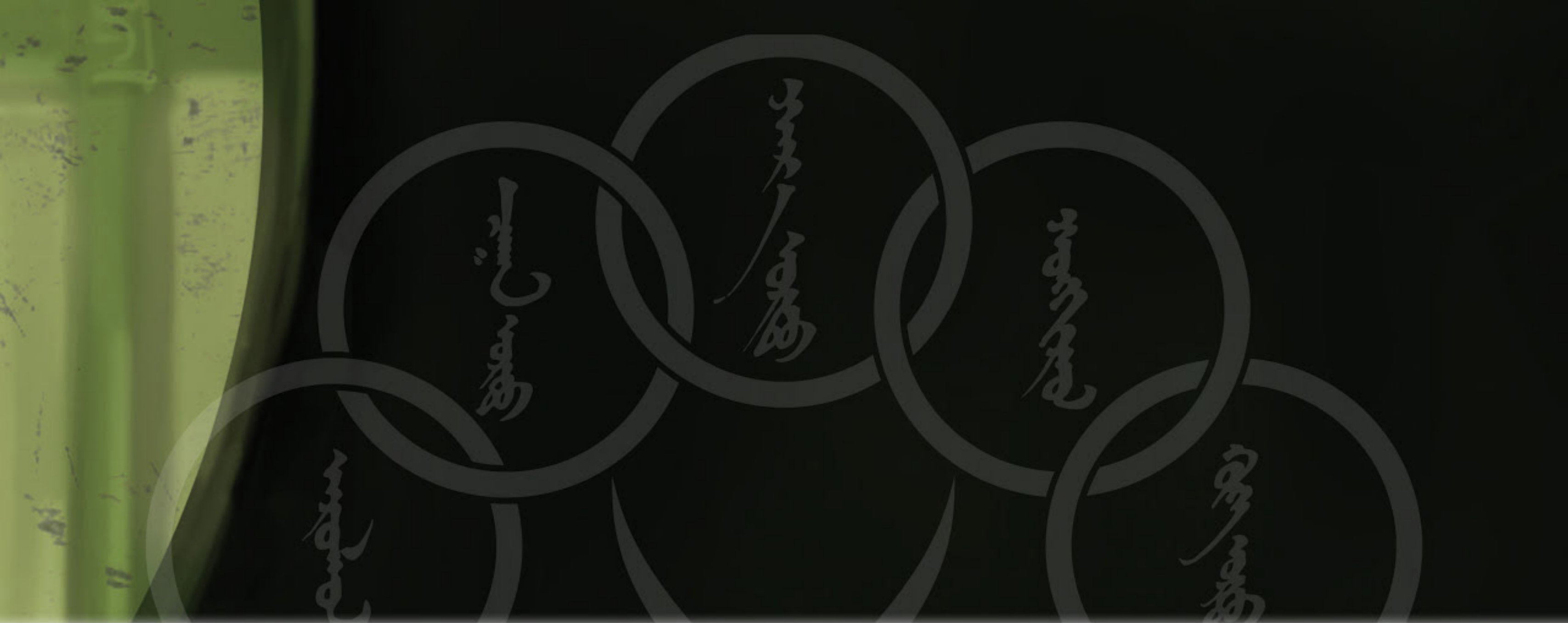




CHAPTER FOUR

NO SUCH THING AS HEROES





In *Iron Man 3*, Tony Stark faces not one but two heavyweight foes: the charismatic terrorist called the Mandarin and Aldrich Killian—the duplicitous leader of A.I.M., a think tank specializing in several different fields including weapons and technology. A sinister web of intrigue links Killian with the Mandarin, and behind them both lurks a mysterious biochemical process that could reshape all of humanity: Extremis.

The Mandarin, played by Ben Kingsley, is both trickster and fearmonger. He boasts several colorful costumes and ten distinctive rings, one on each finger.

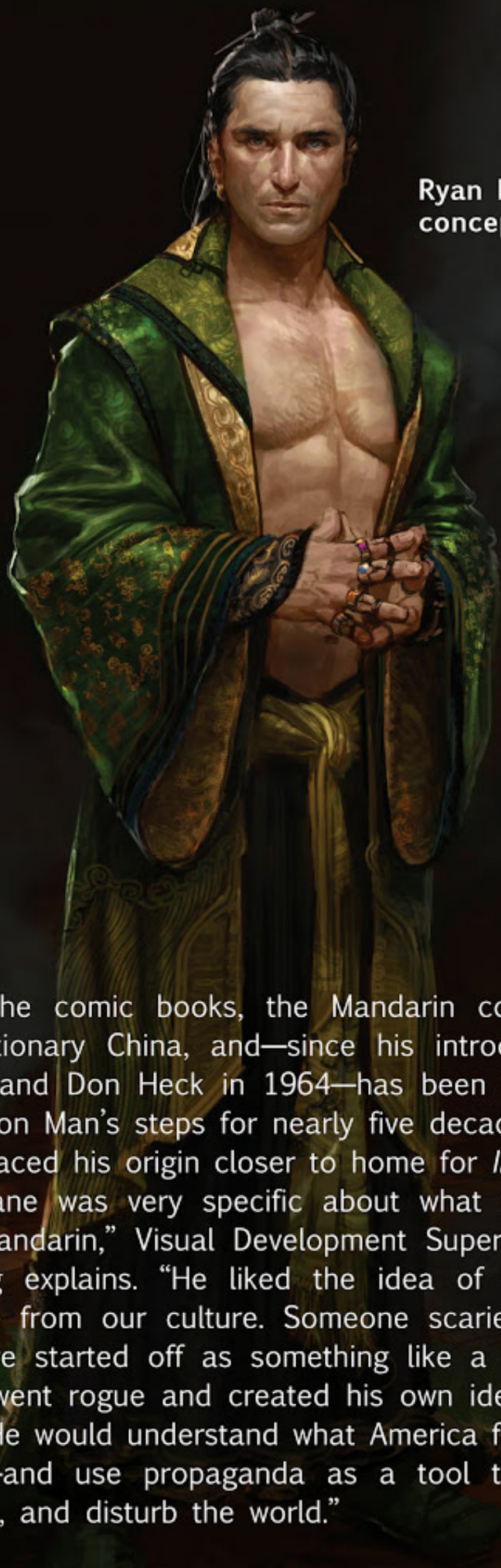
“The symbols on the Mandarin’s rings go way back into the comic-book world,” Property Master Russell Bobbitt explains. “And in my world, it goes back to *Iron Man 1*, where we made a flag with the ten rings on it.

Each symbol represents a different power that the Mandarin has.”

Killian, meanwhile, is an ordinary man whose use of Maya Hansen’s Extremis process transforms him both mentally and physically. And Killian isn’t the only villain powered by Extremis. The process is used to supercharge a small army of extra-powered killers during the course of the film, keeping Tony Stark—and the *Iron Man 3* effects crew—very busy.

“Extremis is fantastical, so we wanted to keep the design of it grounded in reality,” Visual Effects Supervisor Chris Townsend says. “We went through a long design-gestation period, creating and trying to find some organic base to the characters. We were trying to keep that tone of gritty realism throughout, so to suddenly have glowing human beings looking real was always going to be a challenge.”

THE MANDARIN



Ryan Meinerding
concept art.

In the comic books, the Mandarin comes from pre-revolutionary China, and—since his introduction by Stan Lee and Don Heck in 1964—has been villainously dogging Iron Man’s steps for nearly five decades. Marvel Studios placed his origin closer to home for *Iron Man 3*.

“Shane was very specific about what he wanted for the Mandarin,” Visual Development Supervisor Ryan Meinerding explains. “He liked the idea of a terrorist that came from our culture. Someone scarier because he might’ve started off as something like a CIA agent, but then went rogue and created his own ideology and purpose. He would understand what America fears about terrorists—and use propaganda as a tool to frighten, undermine, and disturb the world.”







Meinerding: "His design was meant to hint at an expat soldier that has gone a little insane and is trying to liken himself to a modern Genghis Khan, while still adding flourishes of pop culture. So in looking at the comic references, the easiest place to start was a long flowing robe. We tried to pull the shape themes from the robes and drape that over some more pop-culture driven clothes."

Ryan Meinerding concept art.







Ryan Meinerding concept art.



Ryan Meinerding concept art.



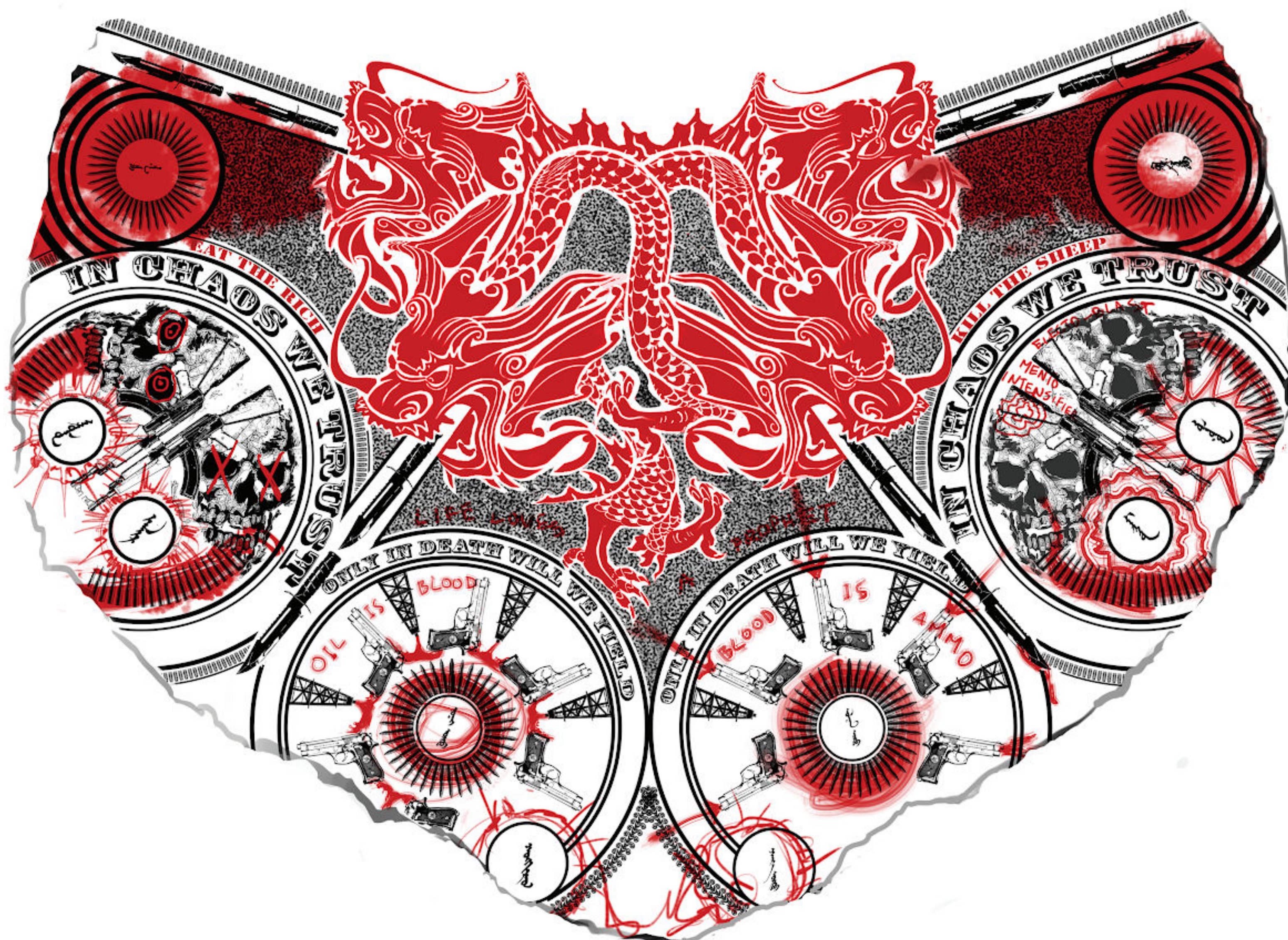
Ryan Meinerding concept art.





Meinerding: "For the dragon robe, I was told to create a graphic that would be equal parts odd, terrifying, and satirical. I tried to pull some design themes from American money, as well as incorporate a stylistically designed dragon."

Ryan Meinerding concept art.





“The Mandarin is one of the most iconic villains in the Marvel Universe,” says Louis D’Esposito, Executive Producer and Co-President of Marvel Studios. “And when you have the opportunity to hire Sir Ben Kingsley to play that role, it’s an opportunity you cannot pass up. He is a brilliant actor. You believe he is the baddest terrorist alive. He’s infiltrated our airways. He can contact the president. But through it all, you realize he’s not who he says he is.”

Andrea Dopaso concept art.



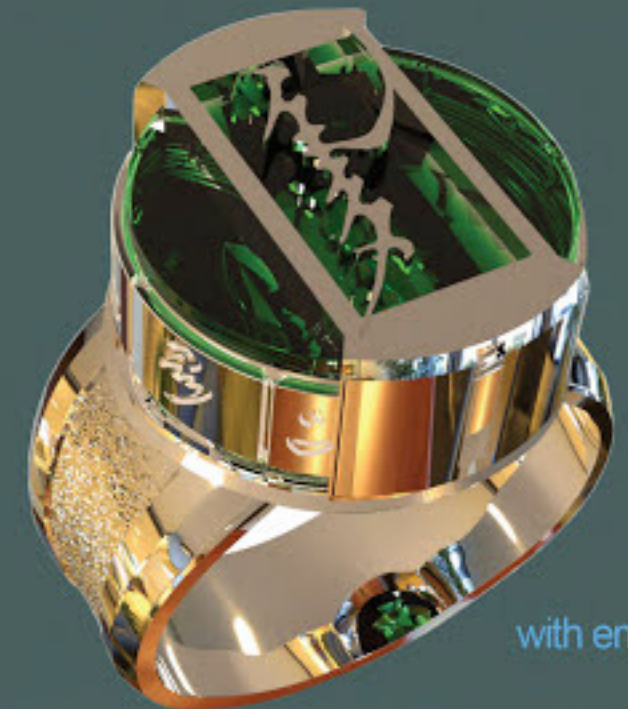
Bobbitt: “The symbols, materials, and gems were all very specific in color—we had to create and manufacture our own stones, and give them custom paint jobs. We swirled colors into some of the resins to emulate real stones. We must have gone through 30 or 40 concepts before we came to the rings that we made.

“The illustration process alone took about a month, and then production time was yet another month. The illustrations are wonderful, but the rings are insane. Part of that is we have such a short period of time. The jewelers look at me like, ‘We can make you one ring in two months’ time—but you’re asking us not only for ten, but also for a backup set.’

“And Sir Ben was on another film while we had to make them. So I called the prop master on his film to measure each finger, so that we could custom-make them for each of his fingers. It’s a lengthy process, but truly a brilliant outcome.”



with lapis lazuli



with emerald



Andrea Dopaso concept art.



IRON MAN - 3 "Mandarin Ring" - 2



IRON MAN - 3 "Mandarin Ring" - 3



IRON MAN - 3 "Mandarin Ring" - 4



palomino jasper



IRON MAN - 3 "Mandarin Ring" 5



IRON MAN - 3 "Mandarin Ring" - 6



"Mandarin Ring" - 7



"Mandarin Ring" - 8



"Mandarin Ring" - 1 option3

IRON MAN - 3

ALDRICH KILLIAN



3.



1b.

Copyrighted material



11b.



Ryan Meinerding concept art. 11d.



1.



2.



EXTREMIS



2d.

Ryan Meinerding concept art.

RM



Chris Townsend: “We based Extremis on natural phenomena—the way chemicals react with other chemicals, the way plants grow, the way limbs regrow on lizards, how fungus grows and decays. We did research based on time-lapse photography, and looked at how light and energy move through different substances. We took

reference from aurora borealis, from time-lapse of lights going across a desert, from putting a bright light source behind a hand and having that sort of internal glow, from X-ray photography—from all kinds of different things. And then we started developing what we wanted it to look like and what we didn’t want it to look like.”

Rodney Fuentebella concept art.



C13

Phil Saunders concept art.



"We had to find ways to make the Extremis effects feel like advanced technology while veering away from something horrific," Concept Artist Rodney Fuentebella explains.

"We didn't want Extremis to look like a medical textbook-type examination of the human body, but we needed to keep it organic at the same time, so we had to find that balance," Townsend says.

C 027
Ryan Meinerding concept art.

Josh Nizzi concept art.



Townsend: "Through rendering and compositing techniques, we were able to blend three-dimensional CG renders of glowing internal structures in with real photography of the person. The challenge has been to feather that in a very subtle way, as subtle as possible so that you always see the actor and performance. You're never taken out of it by this big, glowing, orange thing. And that was sort of the basis of how we created Extremis."

Rodney Fuentebella concept art.

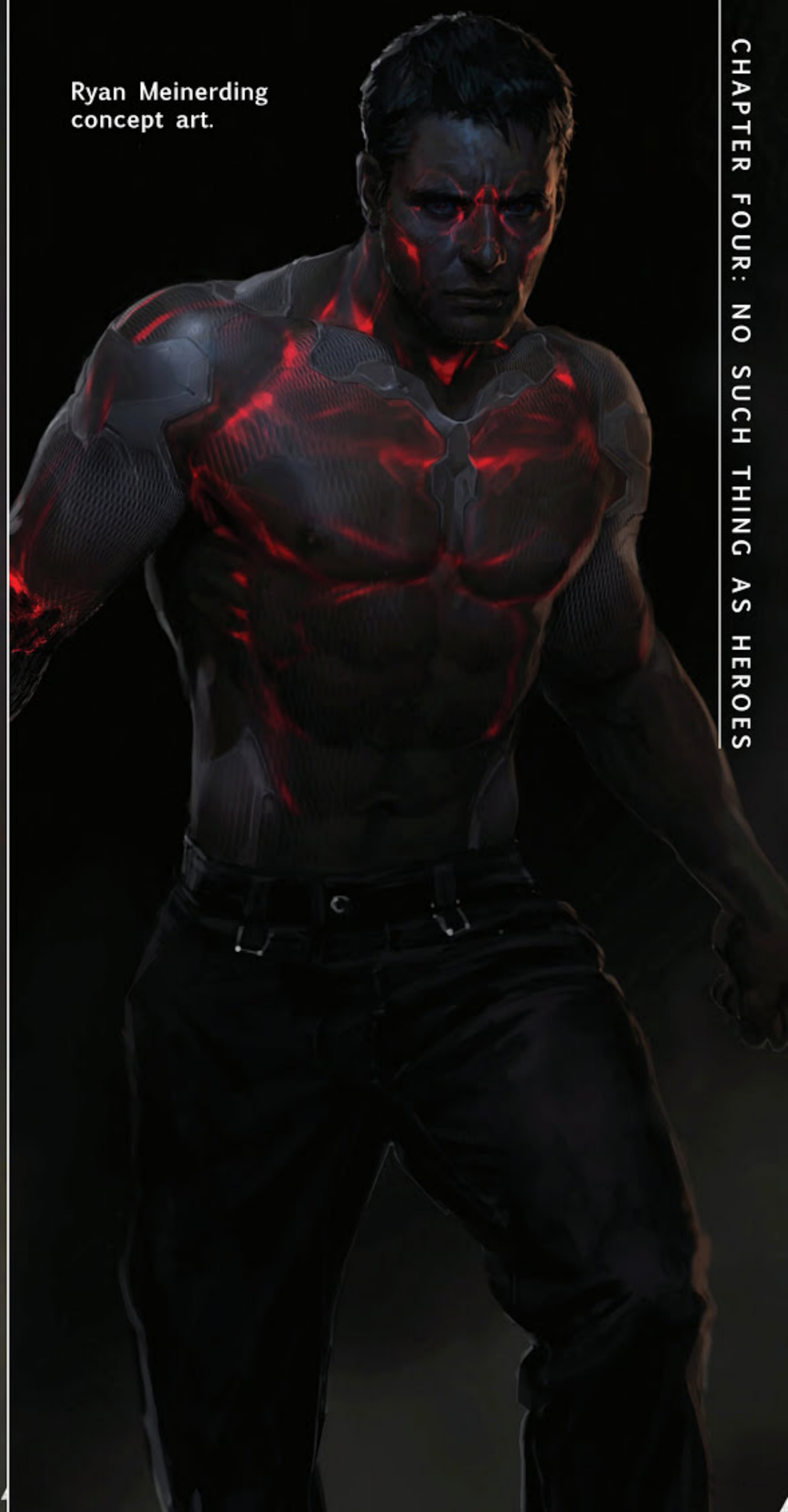


rodney f

Rodney Fuentebella
concept art.



Ryan Meinerding
concept art.



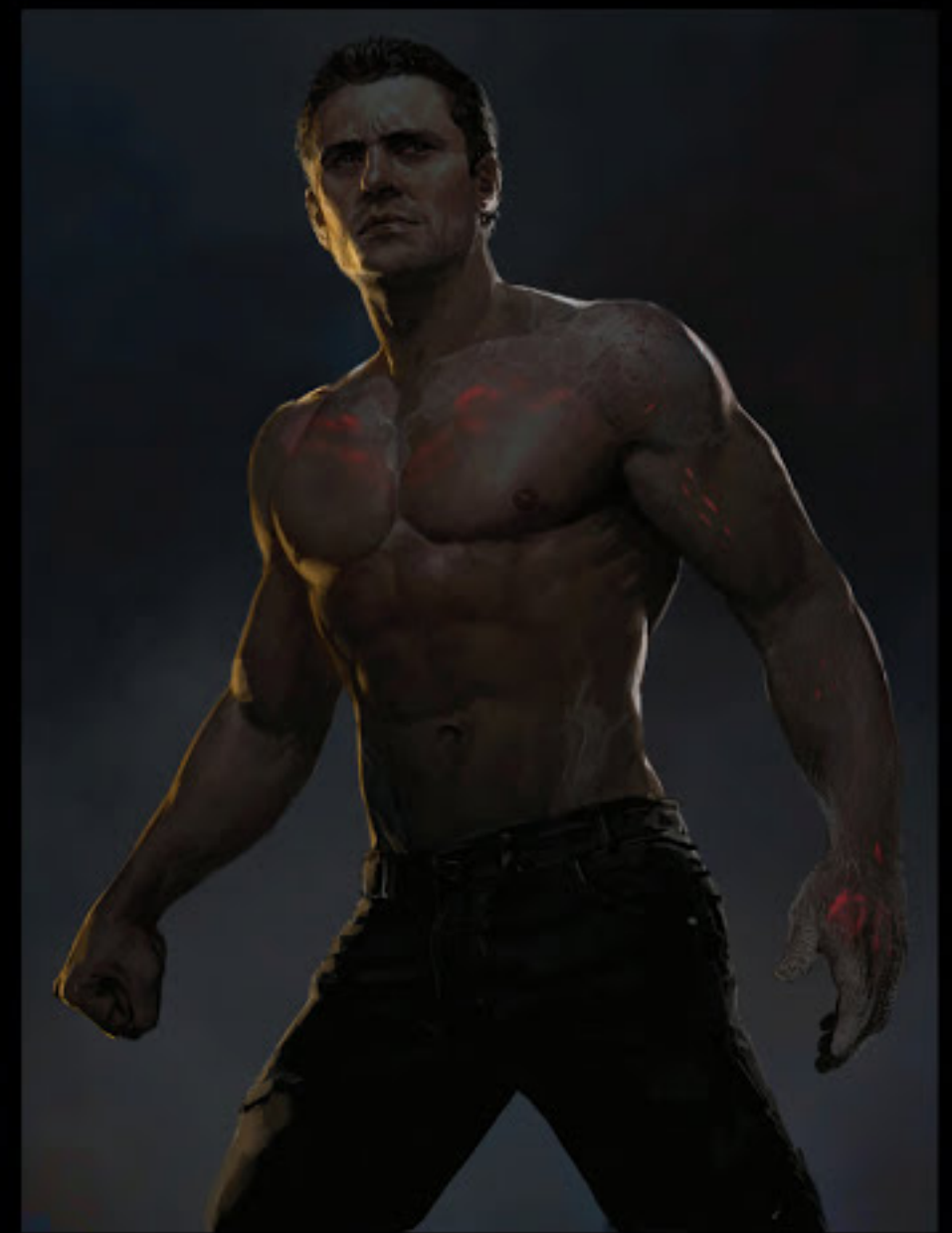
EXTREMIS STUDIES



Fuentebella: “The regenerative-process ideas had to take into consideration the biological and advanced technological power of Extremis—how the effect changed and reorganized bone, muscle, and skin.”

Ryan Meinerding concept art.





“We try to keep *Iron Man* based on some semblance of logic,” Townsend says. “We know Tony Stark making a rocket suit is almost believable. Because there is that level of believability in the whole construct and concept of the

film—based on the comics—we’re trying to maintain it in all aspects, and particularly in the case of something as otherworldly as Extremis.”

Ryan Meinerding concept art.





CHAPTER FIVE

EXTREME MEASURES





In his cinematic adventures to date, Tony Stark has traveled to Monaco, the Middle East, Germany, and even outer space. For *Iron Man 3*, Marvel Studios and director Shane Black faced a tough challenge: Where do you send the man who's been everywhere?

How about rural Tennessee?

Early in the film, Tony drops in—literally, out of the sky—on the sleepy little town of Rosehill, Tennessee. There he finds a team of Extremis agents already waiting for him and embarks on a sequence of events that will change his life forever.

Of course, Rosehill is only one stop on Tony Stark's latest odyssey. The search for the Mandarin leads Tony across the country from Malibu to Miami—where he finds a lush, opulent mansion. This wide variety of settings kept the *Iron Man 3* crew on their jet-booted toes.

"It was all over the place, but that's what we do," Production Designer Bill Brzeski says. "We shot the movie in Wilmington, North Carolina, and we had to find our locations within a driving zone of there—a two-hour radius of the city. So we broke down all the locations we could possibly find in Wilmington, North Carolina, which wasn't everything.

"We went up to Raleigh to do the headquarters for Stark Industries, because there's some very high-tech buildings up there. The seaport, in the finale, was fortuitous. We tried to find something in Miami—but lo and behold, there was a brand-new seaport in Wilmington."

The Seaport provides the setting for the film's breathtaking, climactic aerial battle.

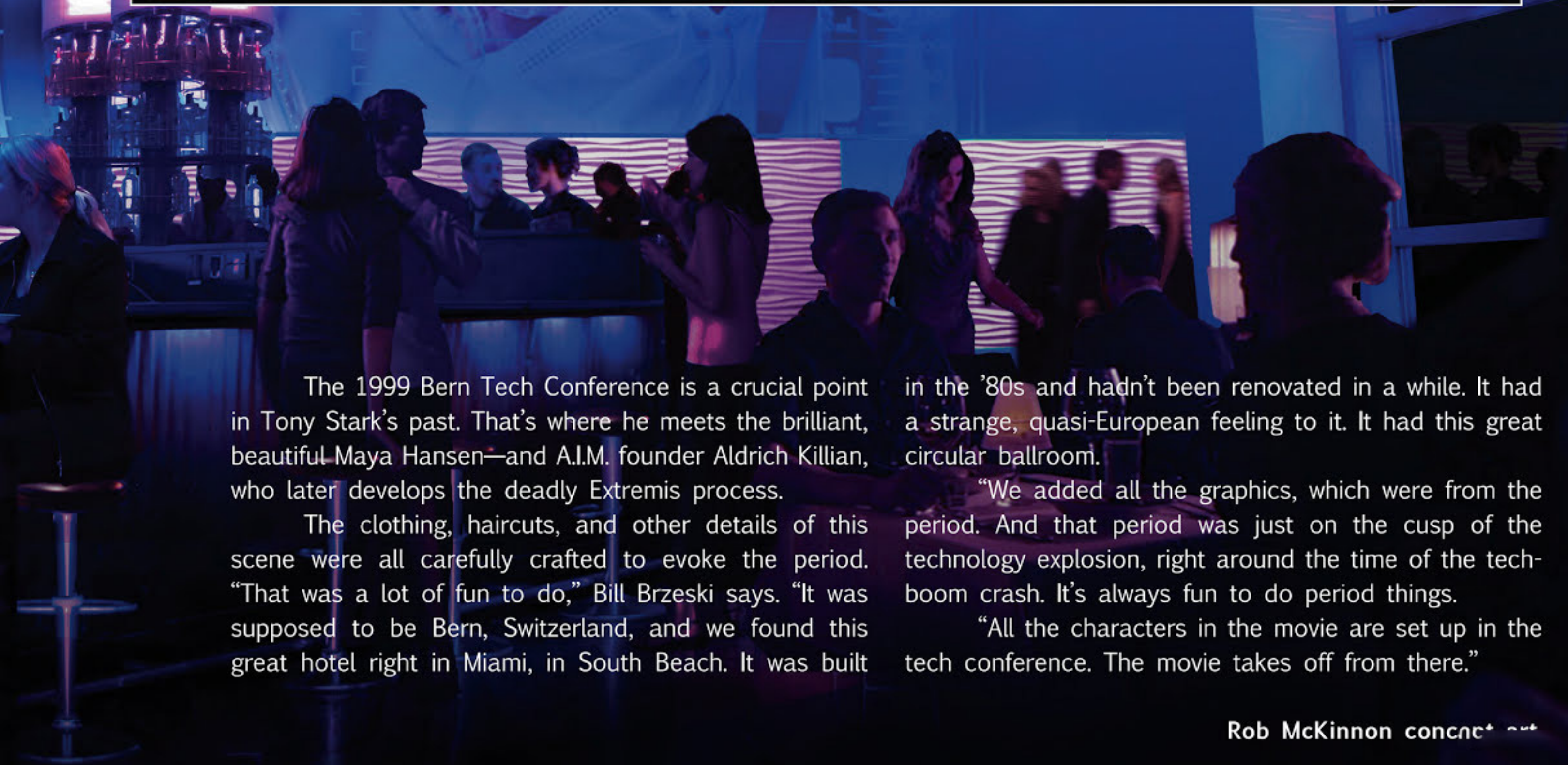
After racking up so many frequent-flier miles, only one question remains for Tony: Where on Earth can he go next?

BERN TECH CONFERENCE



**BERN
TECHNOLOGY
CONFERENCE**





The 1999 Bern Tech Conference is a crucial point in Tony Stark's past. That's where he meets the brilliant, beautiful Maya Hansen—and A.I.M. founder Aldrich Killian, who later develops the deadly Extremis process.

The clothing, haircuts, and other details of this scene were all carefully crafted to evoke the period. "That was a lot of fun to do," Bill Brzeski says. "It was supposed to be Bern, Switzerland, and we found this great hotel right in Miami, in South Beach. It was built

in the '80s and hadn't been renovated in a while. It had a strange, quasi-European feeling to it. It had this great circular ballroom.

"We added all the graphics, which were from the period. And that period was just on the cusp of the technology explosion, right around the time of the tech-boom crash. It's always fun to do period things.

"All the characters in the movie are set up in the tech conference. The movie takes off from there."

STARK INDUSTRIES



No *Iron Man* film would be complete without the lush, opulent offices of Stark Industries. Tony and Pepper Potts rule their techno-financial empire—as always—from a variety of airy lobby and meeting spaces, all designed in bright white and chrome.

“We upgraded it,” Bill Brzeski says. “Pepper is now head of the company. In the last movie, she just basically took over Tony’s office. In this movie, we went one notch

farther and created a compound for her. It’s a little more like a woman is running the corporation, pulling it away from the militaristic aspect of Stark Industries.

“We found a great space in Wilmington, the huge campus of a think tank that does metrics for big banks. They had this amazing building that was all energy-efficient. That fit Pepper: She’s more about trying to be environmentally friendly. So everything’s softer, not all hard lines.”



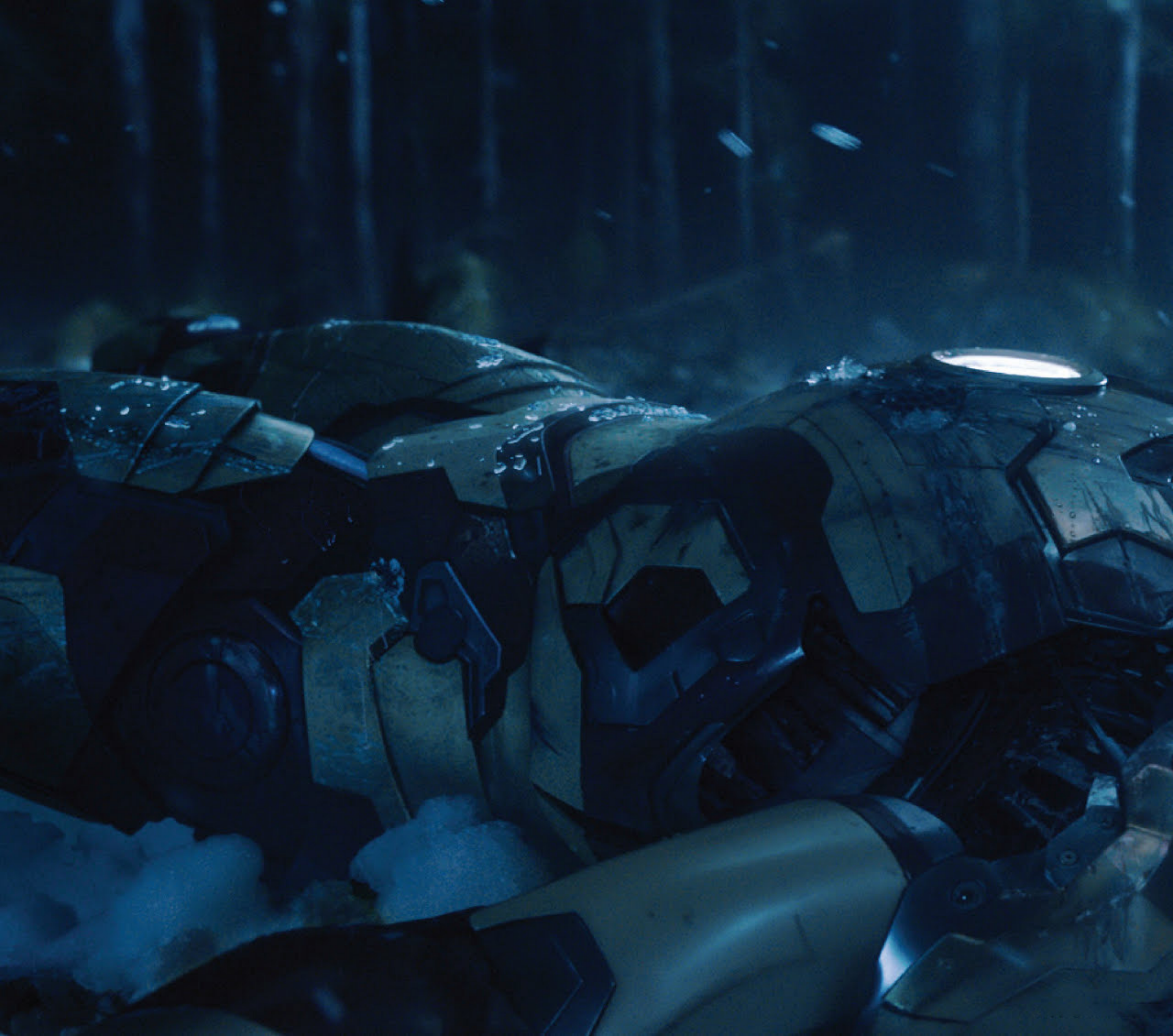
David Moreau concept art.

ROSEHILL, TN

After the assault on Tony Stark's Malibu mansion, our hero finds himself flung across the country to a violent crash landing in the rural South.

"It's predetermined that he flies to this town by J.A.R.V.I.S.," Bill Brzeski explains.







Tony finds himself alone for the first time since he became Iron Man, without his staff or his high-tech gadgets to fall back on. The armor itself becomes a burden as he drags it slowly toward a nearby home.

“Tony walks into the backyard of a house,”

Brzeski says. “We weren’t trying to create a big, huge barn. It was like a mechanic or a dad had a tool shed in his backyard where he repaired vehicles. Maybe he had some kind of repair business. It had to be very open.”



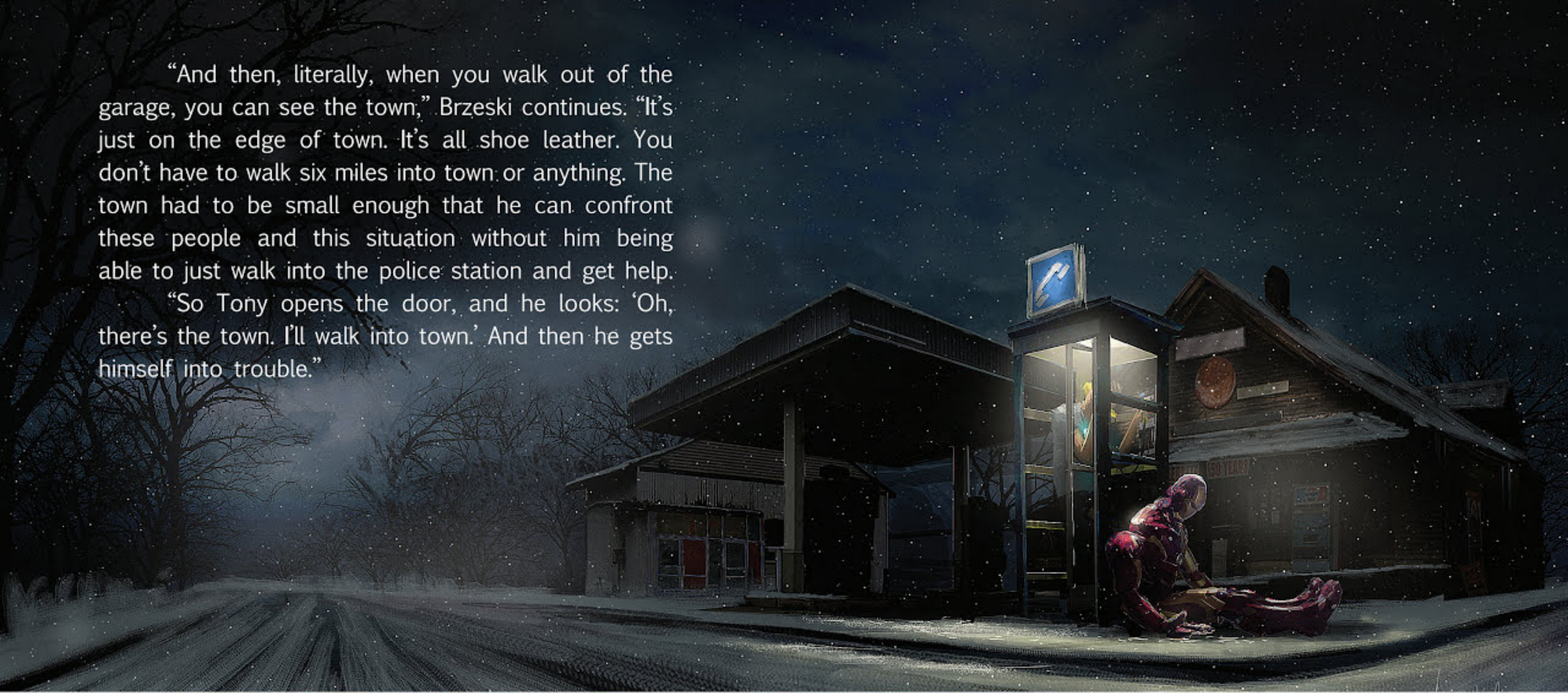
RM



Ryan Meinerding keyframe with production still.

“And then, literally, when you walk out of the garage, you can see the town,” Brzeski continues. “It’s just on the edge of town. It’s all shoe leather. You don’t have to walk six miles into town or anything. The town had to be small enough that he can confront these people and this situation without him being able to just walk into the police station and get help.

“So Tony opens the door, and he looks: ‘Oh, there’s the town. I’ll walk into town.’ And then he gets himself into trouble.”



Andrew Leung concept art.



Andrew Leung concept art.



Bill Brzeski concept art.







Brzeski: “We found this little town in North Carolina, and the town was closed down. It had all moved closer to the freeway, and the old part of town—like so many towns in America—had been left to just crumble. So all the little storefronts and everything were basically locked in the ’50s.

“And in that town, we built a bar—there was no bar.

There was nothing, actually. There was nothing there. The entire town, all the locations, were fabricated for the movie. The storefronts—everything except the hardware store. That whole little winter village. And it’s North Carolina in the summer, so it’s like a hundred degrees outside. And we made winter.”



Andrew Leung concept art.



Rob McKinnon concept art.



Daryldixon.gala100.net



Christmas
TREES

GENERAL

STAR
LUMBER
TS PLUMB
ELECTRICAL SUPPLY







Andrew Leung concept art.







Andrew Leung concept art.

Daryldixon.gala100.net

Brzeski: "In the back of my mind, too, Harley—who's this really bright kid—is like a little Tony Stark. And this is his little play shop. His father is deceased, so this is where he goes and fools around with his father's old tools, learning how to use them. In the course of the movie, we redo that shed and make it into kind of a high-tech place. We clean it up and put more fun tools in there, things for a ten-year-old boy:

microscopes and telescopes and computers. We really slick it up to make it feel like it's a little miniature Tony Stark garage.

"That was the imagery I was constantly going for: This is the opposite of Tony's garage. He walks in the door, and now he's got to deal with how to hook a battery up to his suit and get it going. He doesn't have all the bells and whistles of his own workshop."





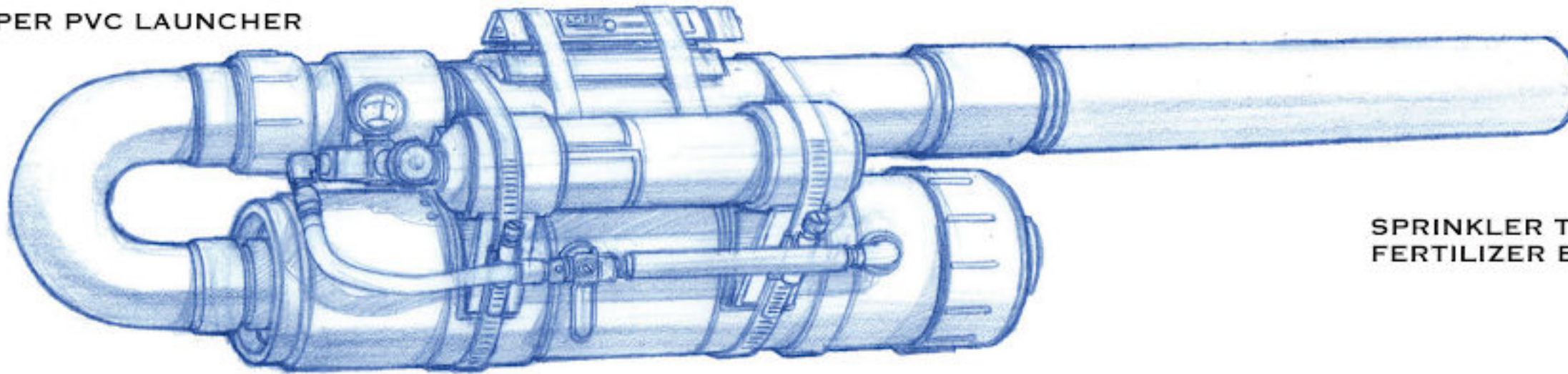
HOMEMADE WEAPONS

Where does a genius inventor go when all his labs and equipment are taken away? To the hardware store, of course. Propmaster Russell Bobbitt explains the secrets behind Tony Stark's unique, handmade weapons.

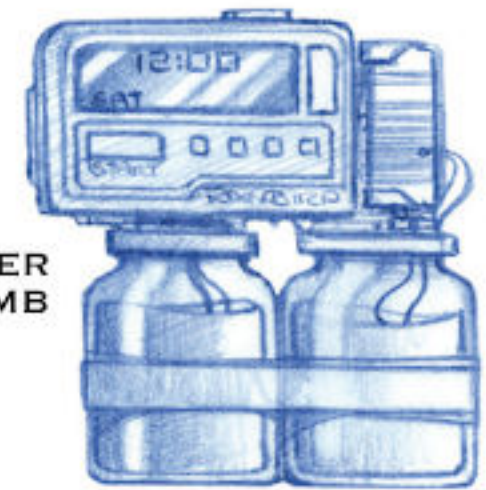
"First I went online. Now, if Big Brother was watching me on the computer, they're probably going to knock on my door any minute because I looked up a lot of crazy weapons that people were making. I found a real gun that was made out of plumbing fixtures and pipes. I based these weapons on a lot of things that were actually going on out there in the world.

"But then I embellished and used my imagination. I took a staple gun and put a fake air tank on it so that, in my mind, that would increase the pressure of the gun and shoot the staple a hundred times faster than a real staple gun or nail gun would. You sort of put your head into the state of a person who would take a piece of metal and make a knife out of it. You have to play that role a little bit, and put yourself in a place where, 'All I have is what I can fill my shopping cart up with, in a hardware store. How do I make weapons?'

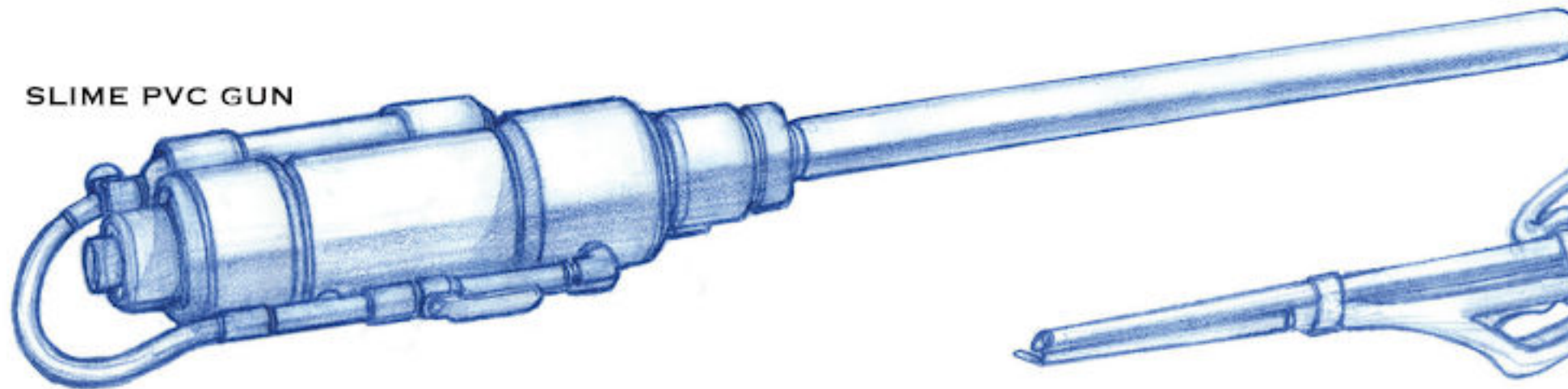
SUPER PVC LAUNCHER



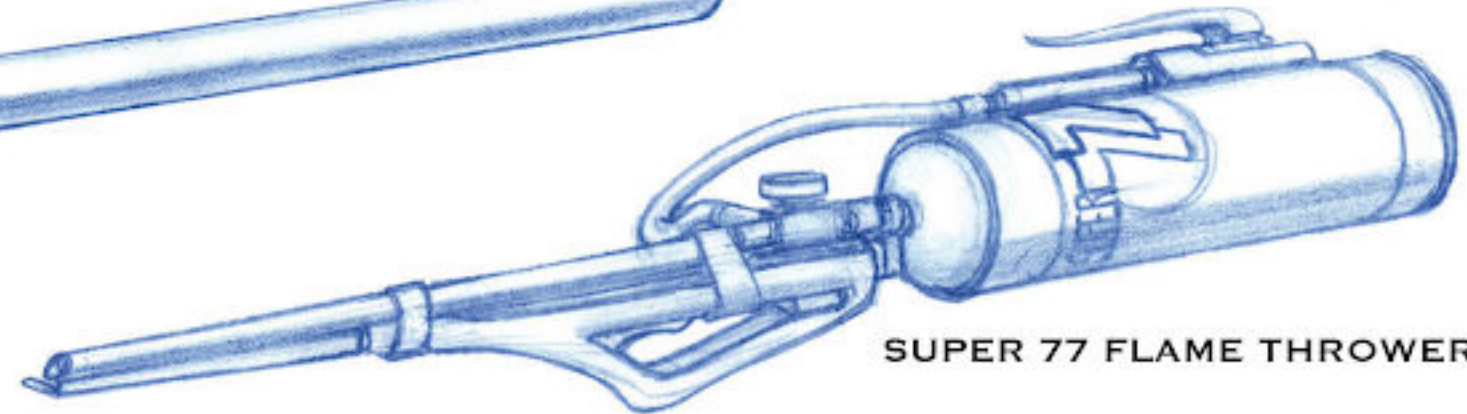
SPRINKLER TIMER
FERTILIZER BOMB



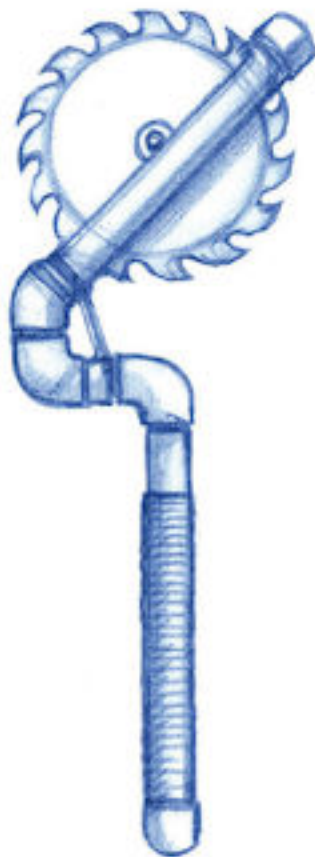
SLIME PVC GUN



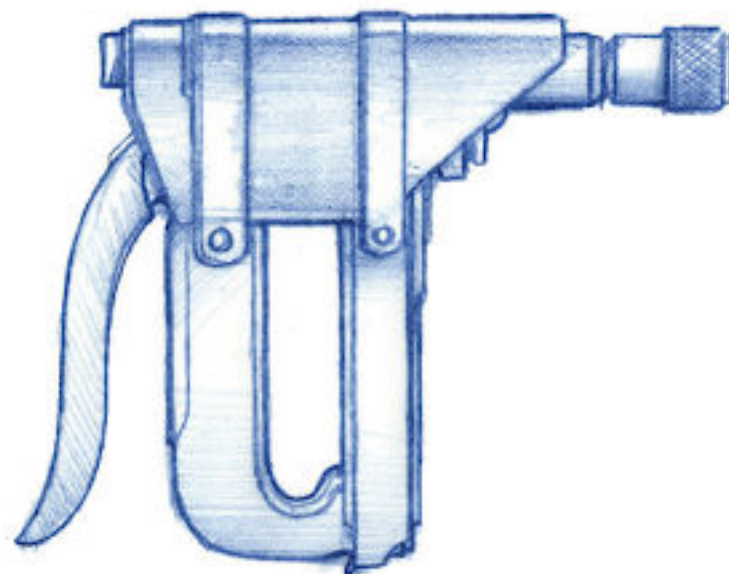
SUPER 77 FLAME THROWER



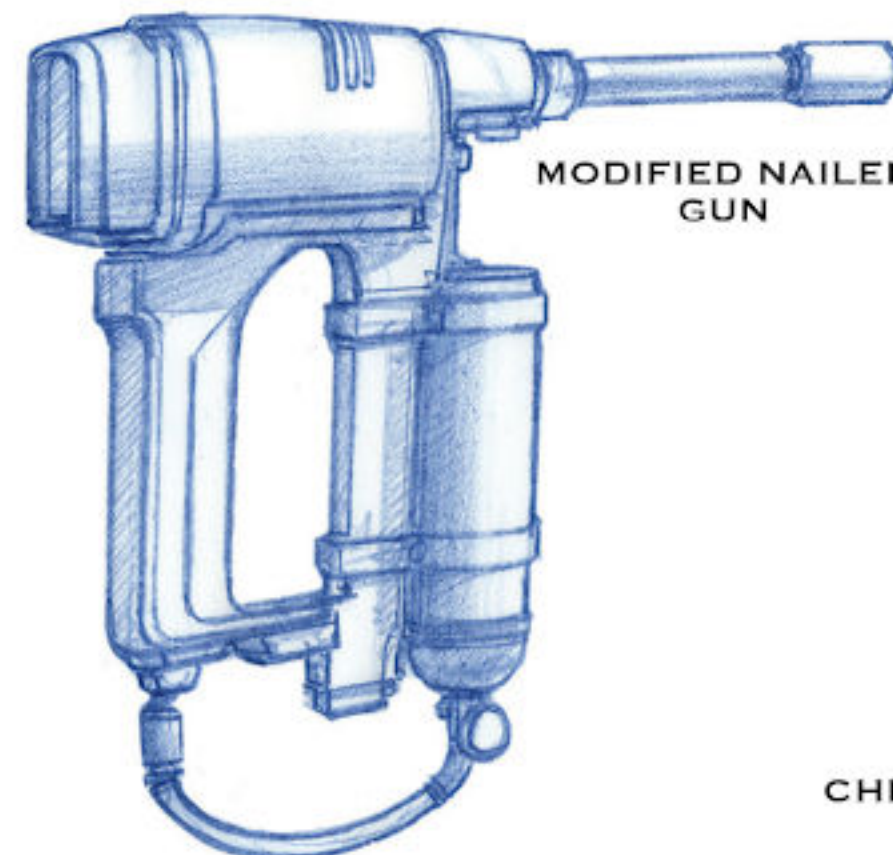
SAW BLADE
THROWER



STAPLE (GUN)



MODIFIED NAILER
GUN



CHLORINE GAS GRENADE



John Eaves concept art.

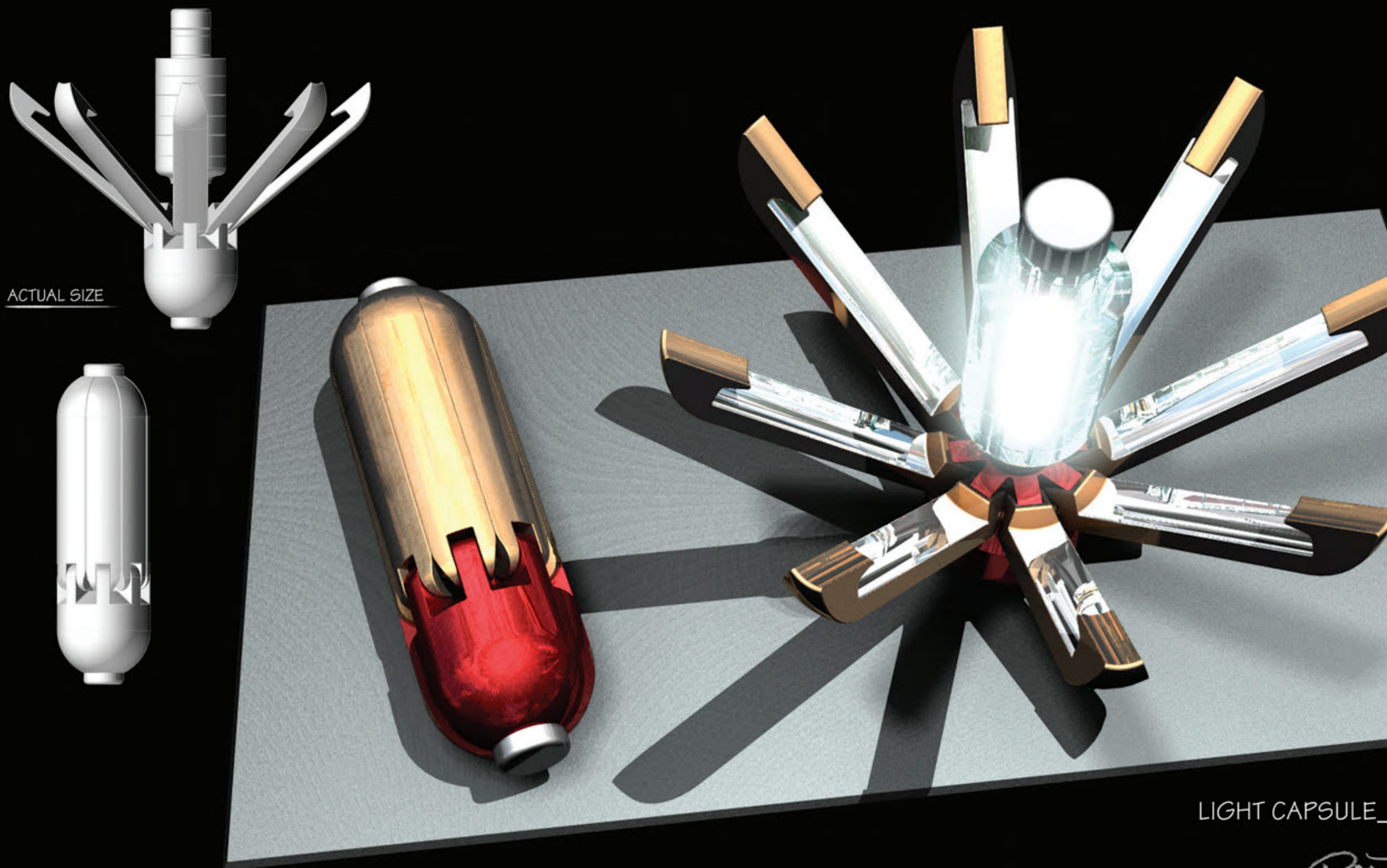
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Even as he's building new weapons, Tony salvages the Light Capsule from his shattered Iron Man armor and gives it to Harley, the boy who's befriended him. Just as Tony's past sins have often come back to haunt him, this act of generosity winds up helping save his life.

Bobbit describes the Light Capsule as "a very challenging piece, because I wanted it to work practically. So I came up with a design based on a hybrid of a real flower and the

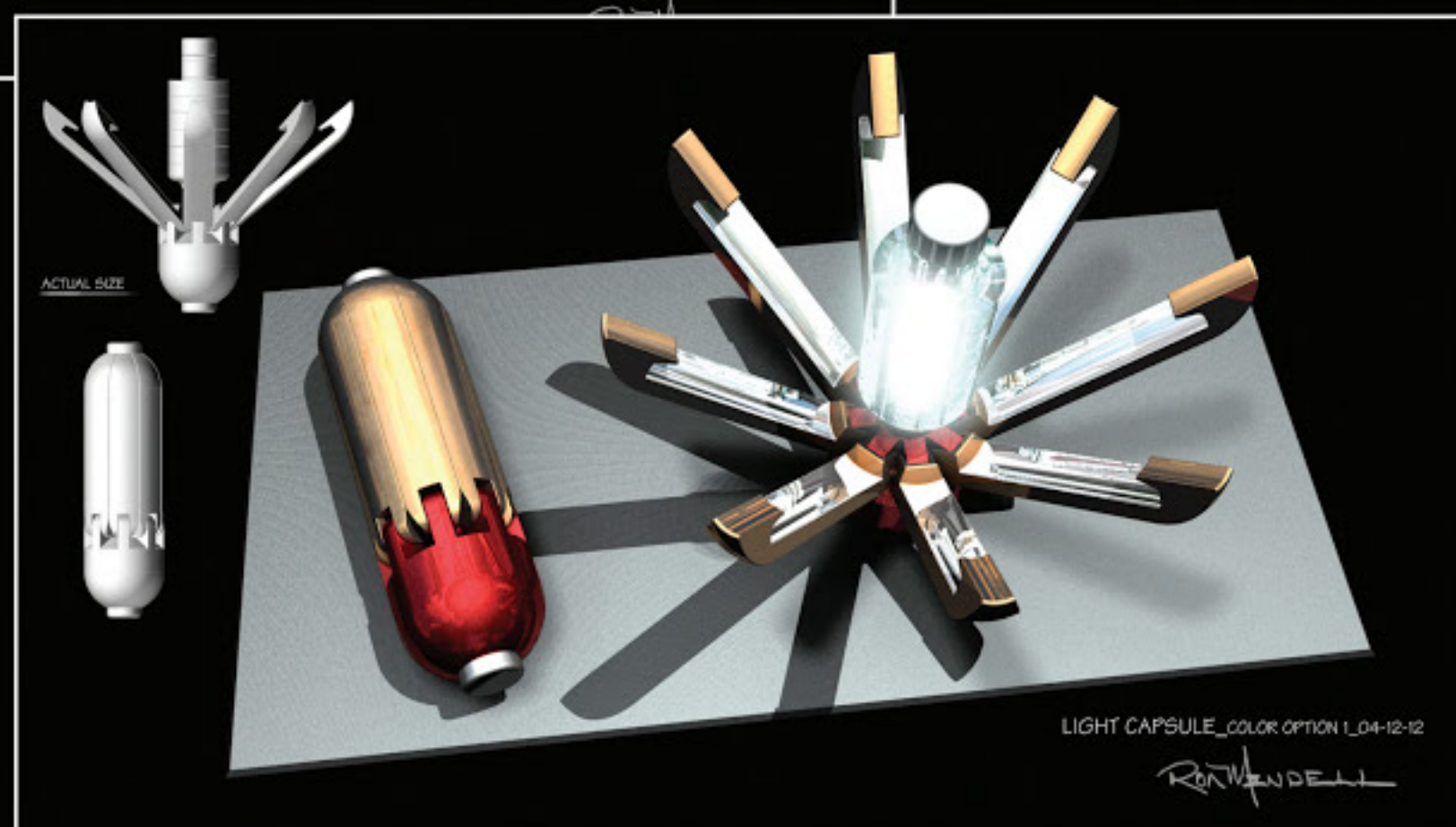
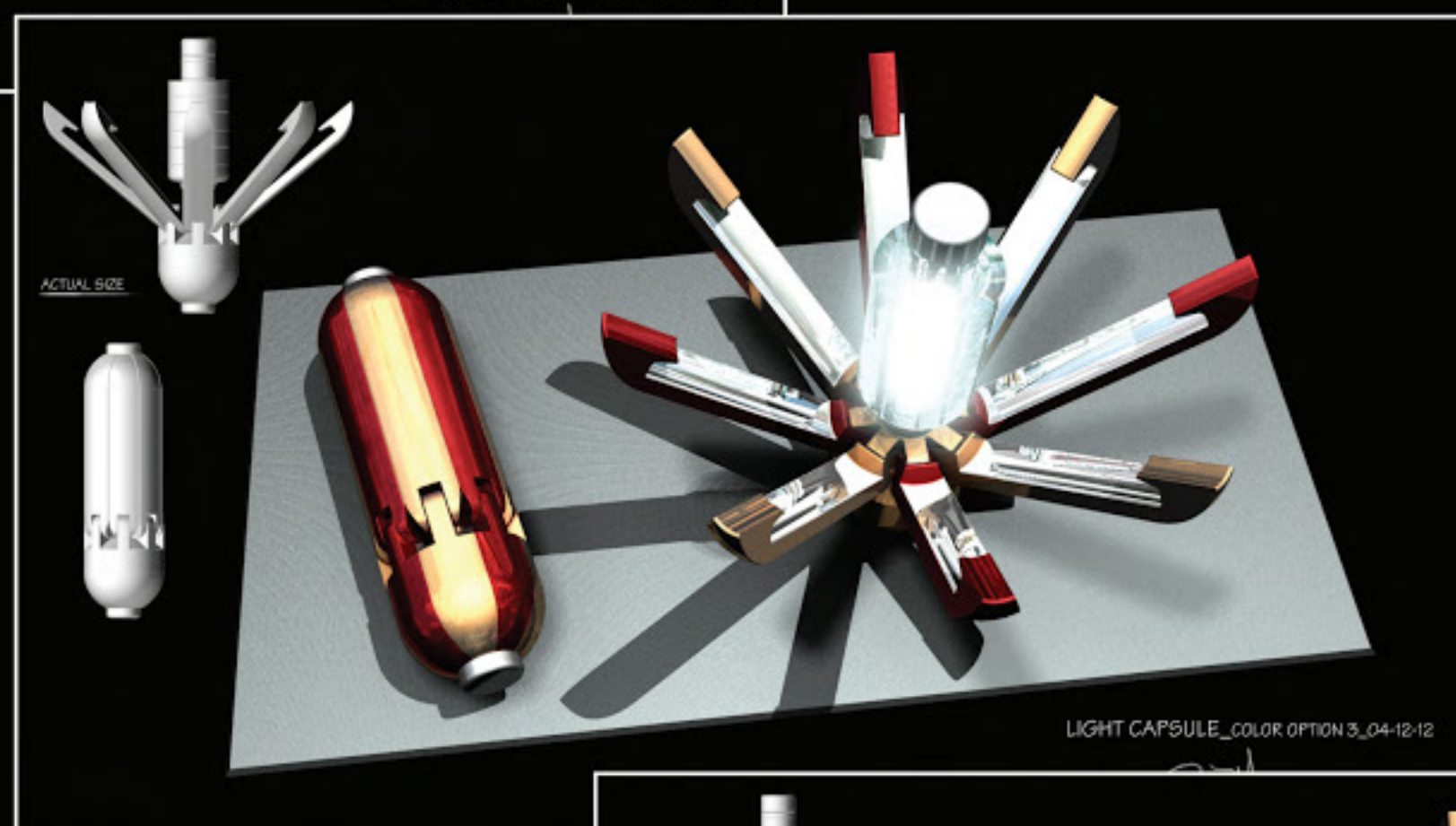
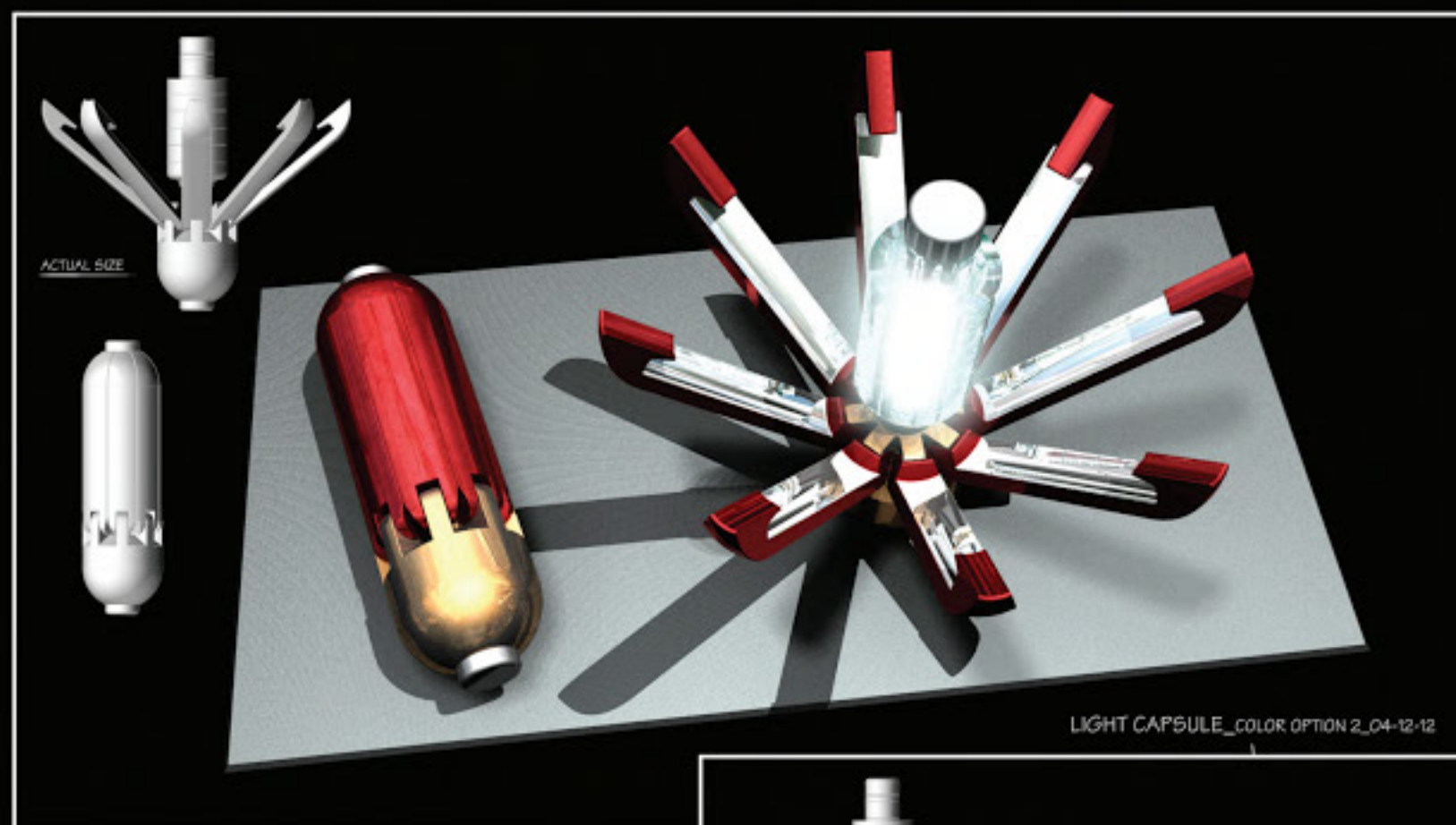
'flower' that is found in the fireworks industry. The prop had to appear harmless to the naked eye, but it needed to be quite lethal when implemented. So I came up with a spring-loaded mechanism that bloomed like a flower at the touch of a button, unleashing a high-powered light that blinds the enemy.

"A very intricate design and build that took a lot of R&D time. But it not only looked great, it worked very well."



LIGHT CAPSULE_

RON



_COLOR OPTION 1_04-12-12

RON MENDALL

BEAUTY PAGEANT



Without his armor, Tony Stark must rely on his wits—as when he disrupts a beauty pageant, using it as a diversion while he “borrows” a TV news van’s satellite hookup. While the pageant is only on-screen for a short period of time, the crew took a great deal of care in developing this sequence.

“That was a lot of fun,” Bill Brzeski recalls. “Basically, Tony’s driving down the road and he sees a little home-town Christmas beauty pageant—like something you might find in a small-town community—in this little municipal building.

“And we found a little auditorium that was perfect. It was like an hour, forty-five minutes past Rosehill. They’d put a little drop onstage and some snowflakes, and they would do a little county beauty pageant at Christmas. So we played it like that: very rural, very down home. The tables were kind of funky, the dressing was...not handmade, but something you’d expect to see in the Midwest. Much more laid-back than some East Coast, big-city sort of thing. It was a fun little set, with a twinkly backdrop. It had a Christmas scene in it, with Christmas trees, and we built these little snowflake pieces.”



MANDARIN'S MIAMI MANSION

Tony tracks the Mandarin to an old mansion in Miami, Florida. As Bill Brzeski explains, it took a unique combination of real-life locations to create the movie's terrorist hideout.

"In a mansion in Quintero, Florida, they had a beautiful ballroom, which is pretty out of character for a house. We matched that into the property of the Vizcaya Museum and Gardens, which is this huge mansion from the Gilded Age, built in Miami in the 1910s. The two of them were matched together to create the grounds of the Mandarin's mansion. The Vizcaya Museum and Gardens was the exterior.

"And just to make it even more complicated, we did the drive-up piece in Palos Verdes. So it took Palos Verdes, two houses in Miami, and a stage set—four pieces—to make that whole thing come together."



Daryldixon.gala100.net



Rob McKinnon concept art.







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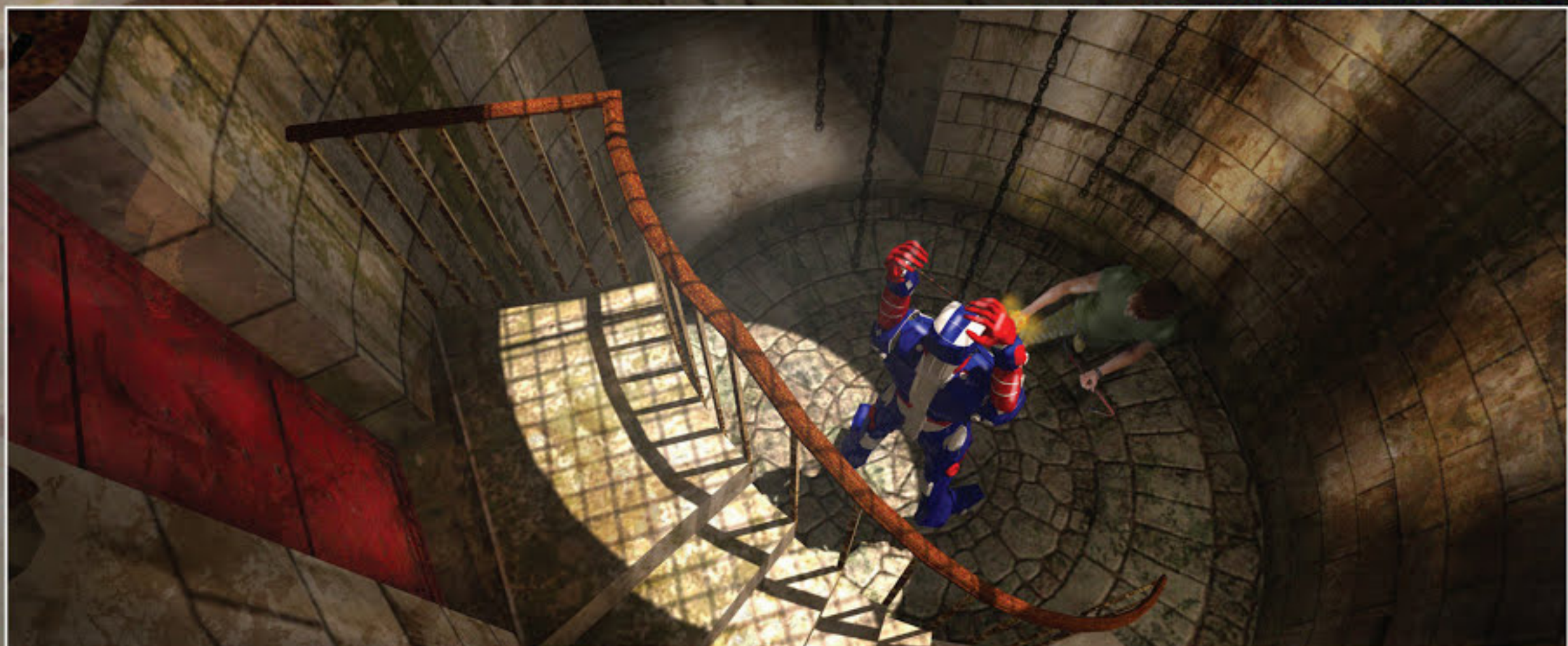




Andrew Leung concept art.









Andrew Leung concept art.



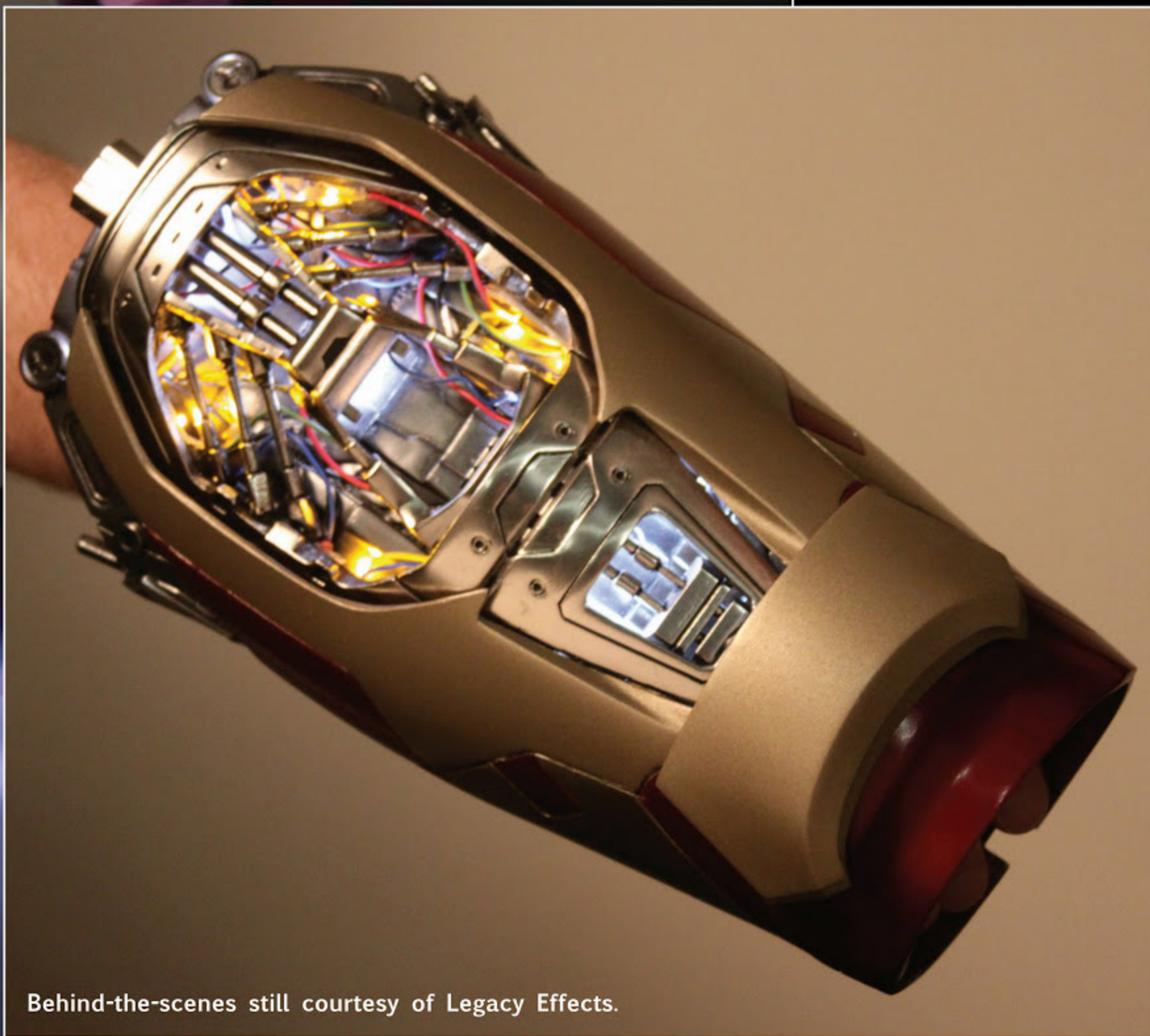


Andrew Leung concept art.



Rob McKinnon concept art.

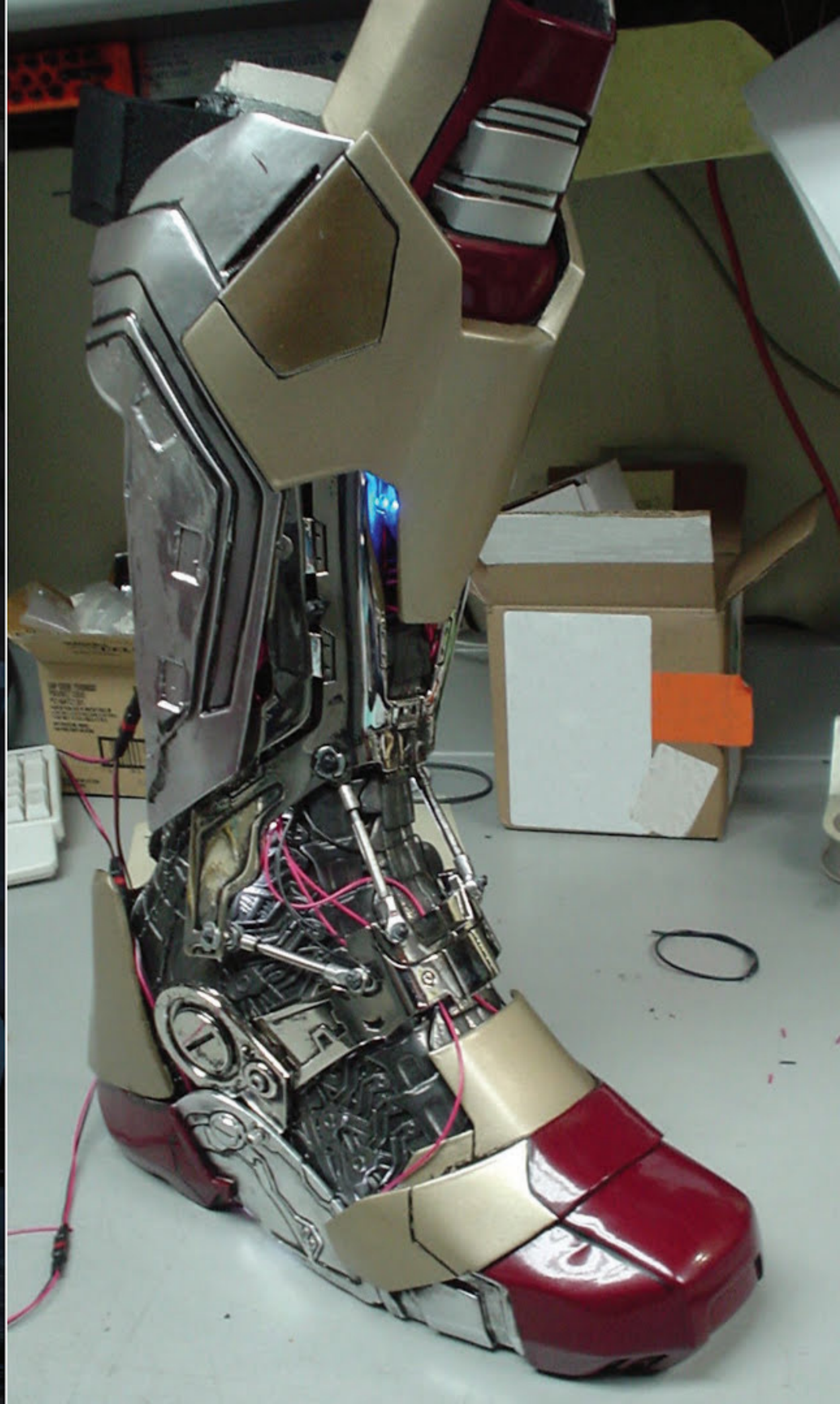
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Behind-the-scenes still courtesy of Legacy Effects.



Phil Saunders concept art.





According to Visual Effects Supervisor Chris Townsend, Tony Stark's new technology posed another challenge to the crew. "The new thing about the suit is that it's able to fly on, to attach to the body in multiple pieces, rather than the whole suit flying as a single piece. Tony has developed this tech. He's able to call the suit to him as an individual arm or a leg, or even part of an arm or leg, the front part of his chest or the back.

"To create that sequence and not make it look magical was an incredible challenge. It needs to still feel somewhat mechanical. There are shots of the pieces lifting up off the table and hovering and then flying. We're trying to find that fine balance between giving a piece of the suit a bit of character, a bit of personality, but not too much. It's a mechanical thing, but it has almost a mind of its own. But it's not autonomous.

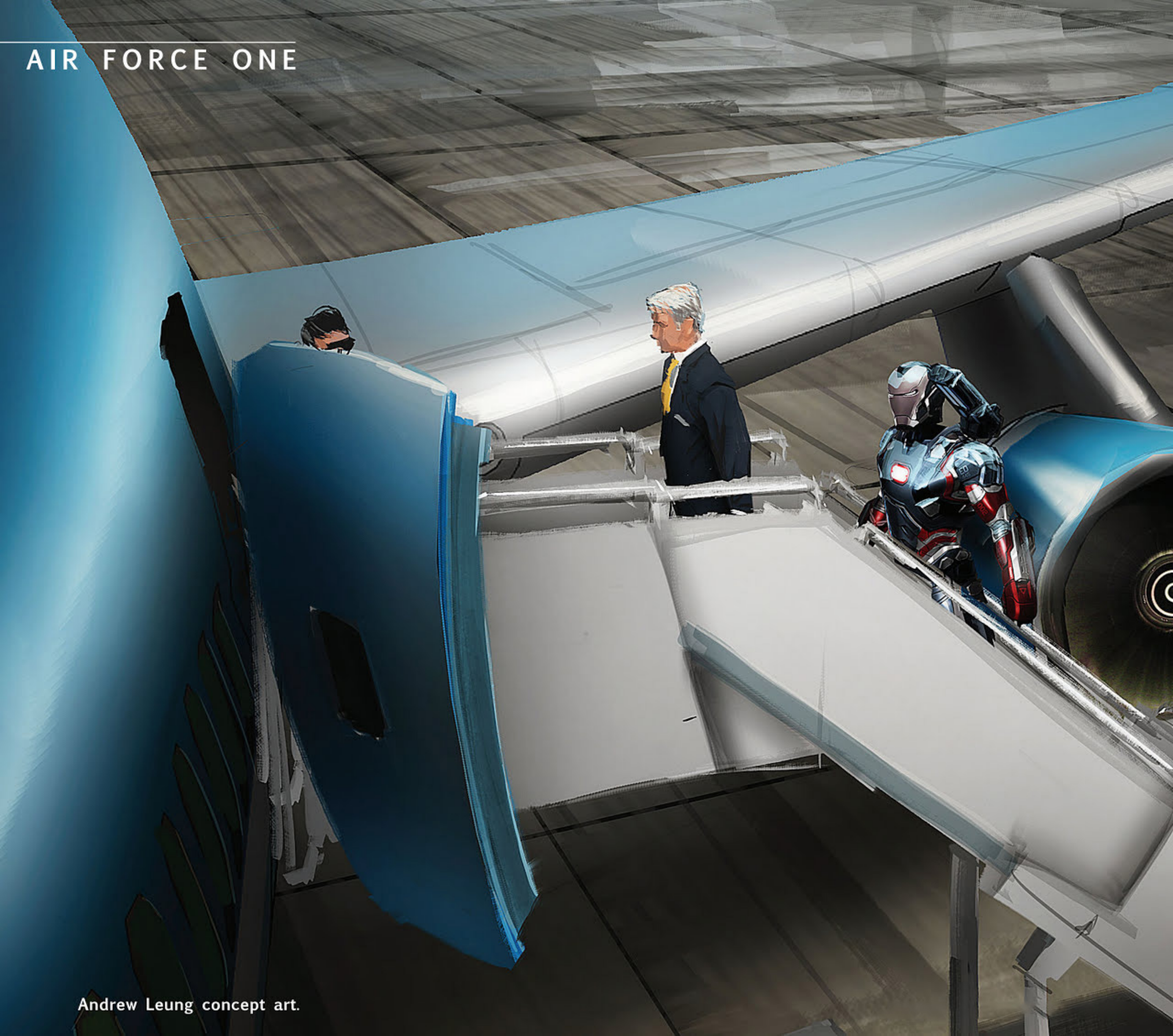
"So you're always balancing between the techie side and the 'magic.' Trying to keep it fun so people enjoy the sequence, but always maintaining that same level of realism that was created in the first films."

PRODUCTION CONCEPT ART
RYAN MEINERDING
2012

Ryan Meinerding keyframe.



AIR FORCE ONE



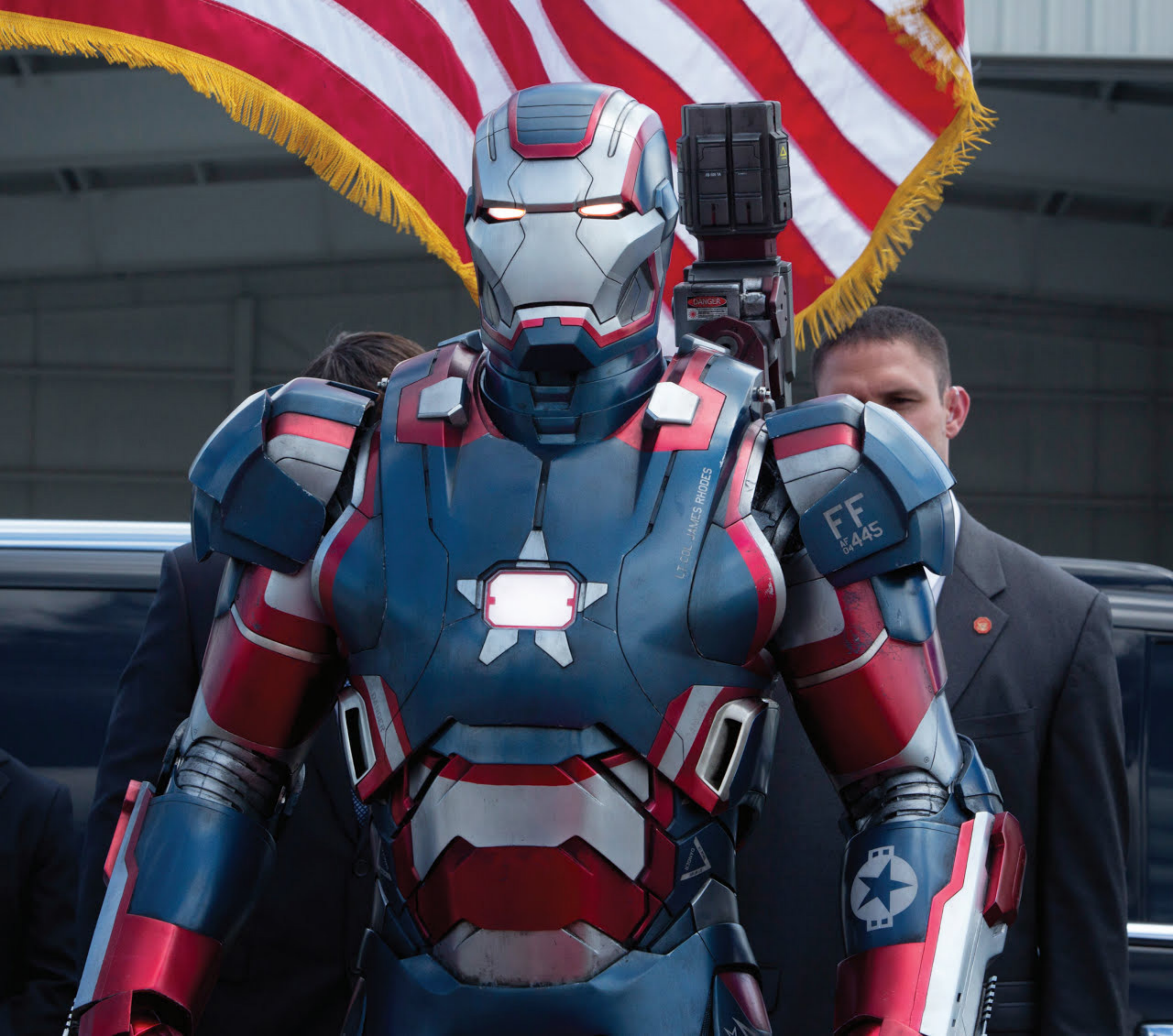
Andrew Leung concept art.



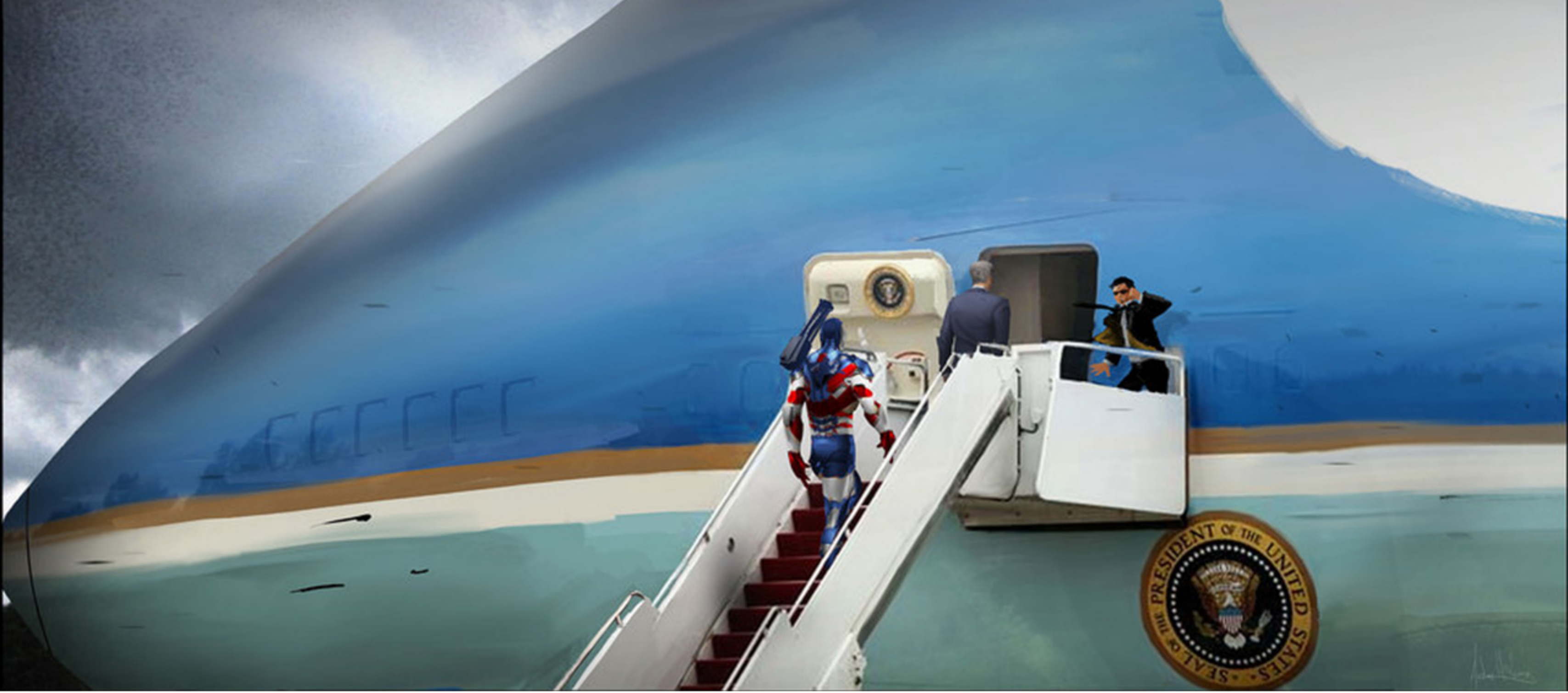
While Tony and Rhodey are busy escaping from the mansion, “Iron Patriot” boards Air Force One, supposedly to guard the president of the United States. But no one aboard realizes that under his helmet, this Iron Patriot is not James Rhodes.

The plane is based closely on the real Air Force One, but “we reconfigured it,” Bill Brzeski says. “We upgraded a few things. The real plane’s much bigger than ours. What we did was: You got on to the plane, and the office and the conference room were pretty much exactly like Air Force One. People know that plane; you can’t make it up.

“But when you go in where the people sit, in the back, we just made that a little bit smaller and put a wall across there. We did not show the upstairs of the plane where the communications centers are. All that wasn’t necessary for the storytelling, because basically what happens is the plane blows up rather quickly and the people get sucked out.”



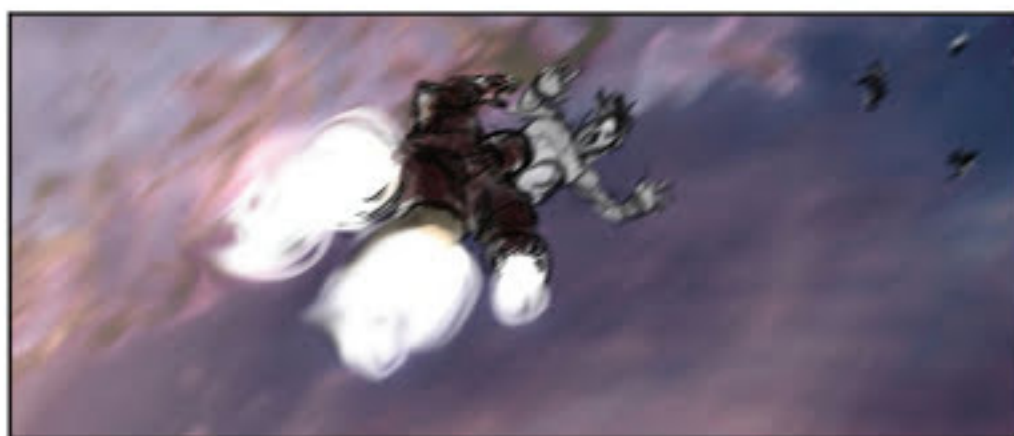
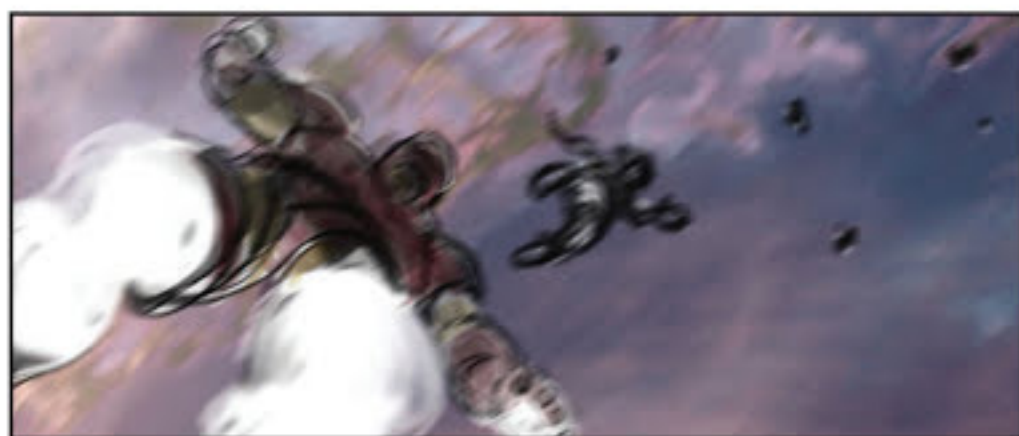




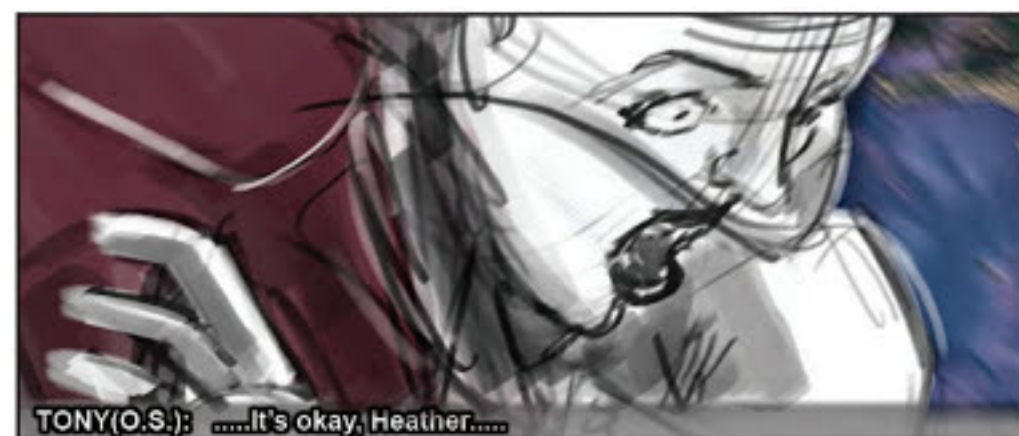
Andrew Leung Concept Art



Daryldixon.gala100.net



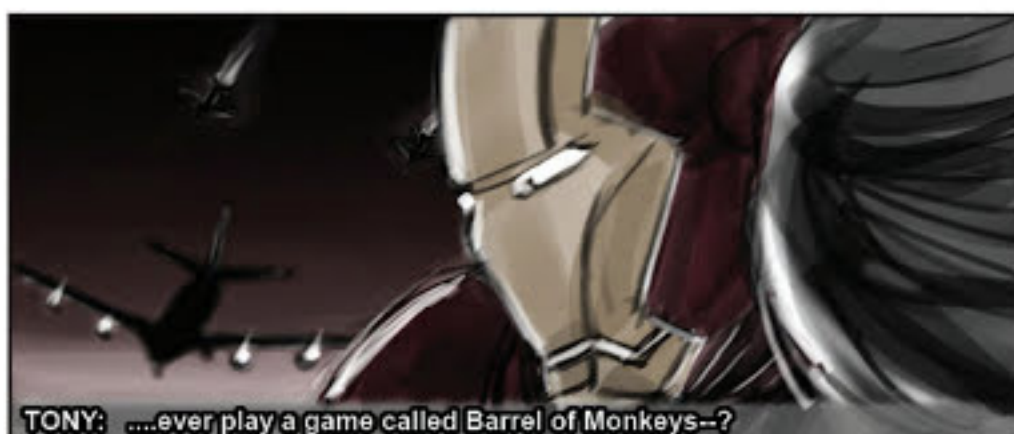
TONY(O.S.): Shhhh. Yeah, I know.....



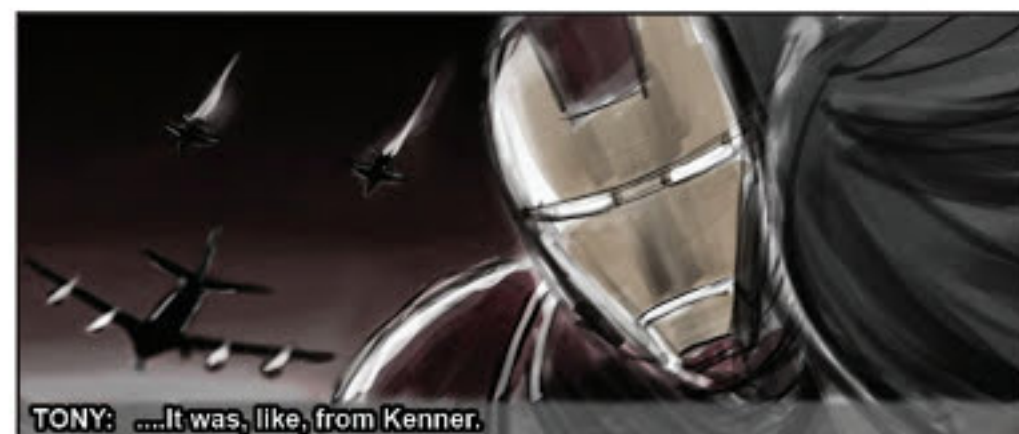
TONY(O.S.):It's okay, Heather.....



TONY:Say listen -- when you were a kid....



TONY:ever play a game called Barrel of Monkeys--?



TONY:It was, like, from Kenner.



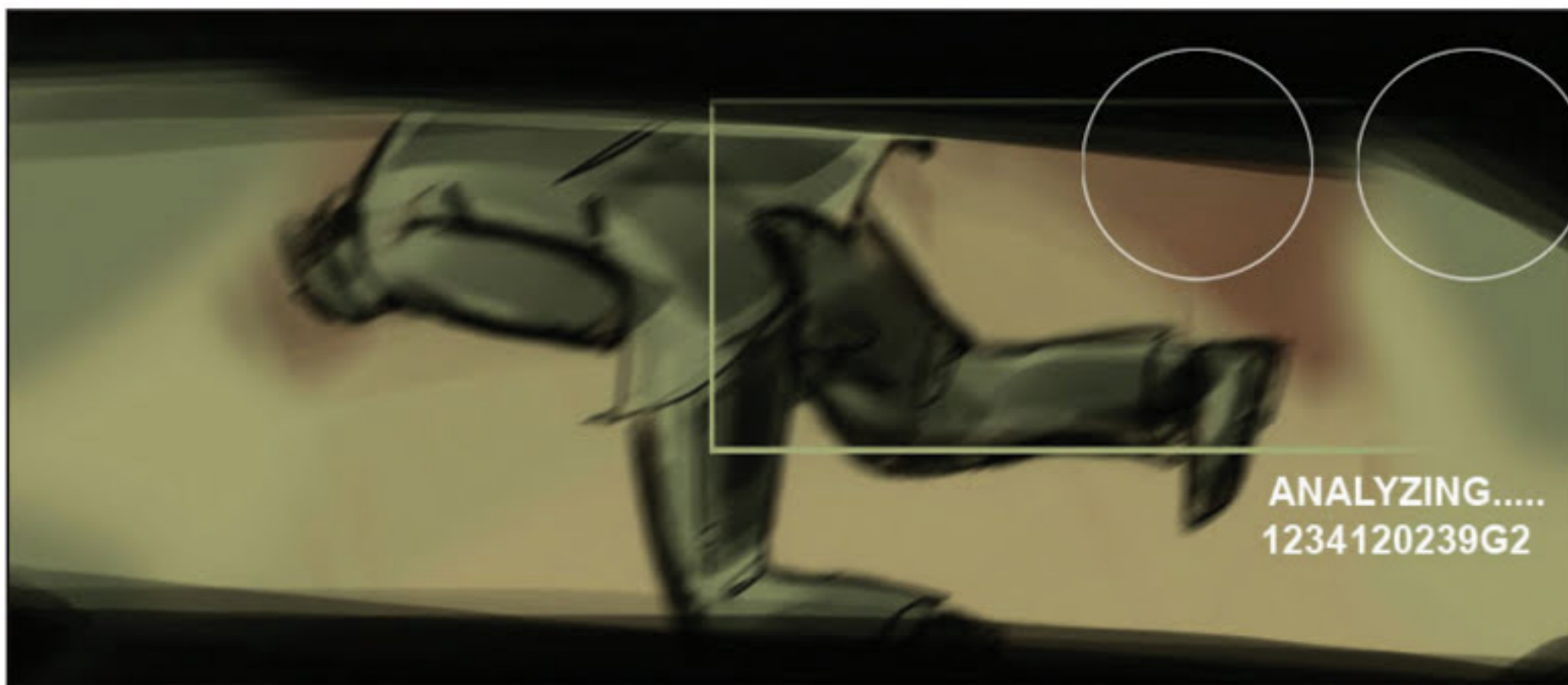
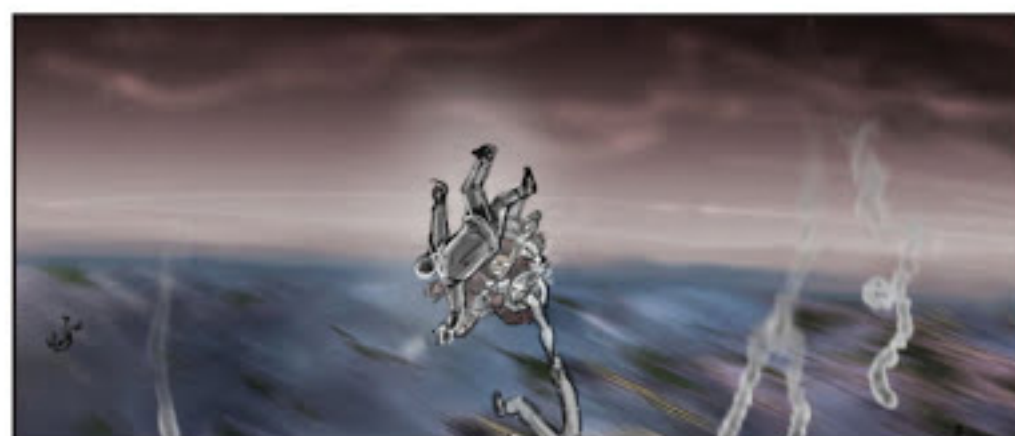
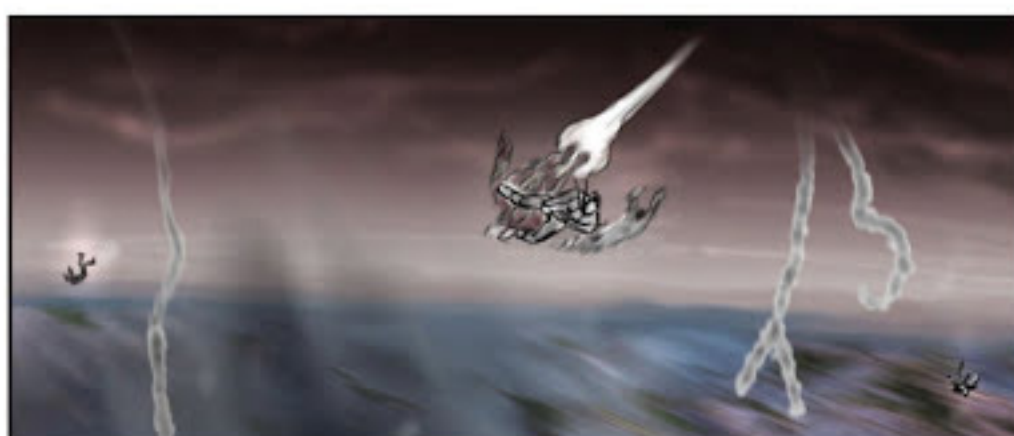
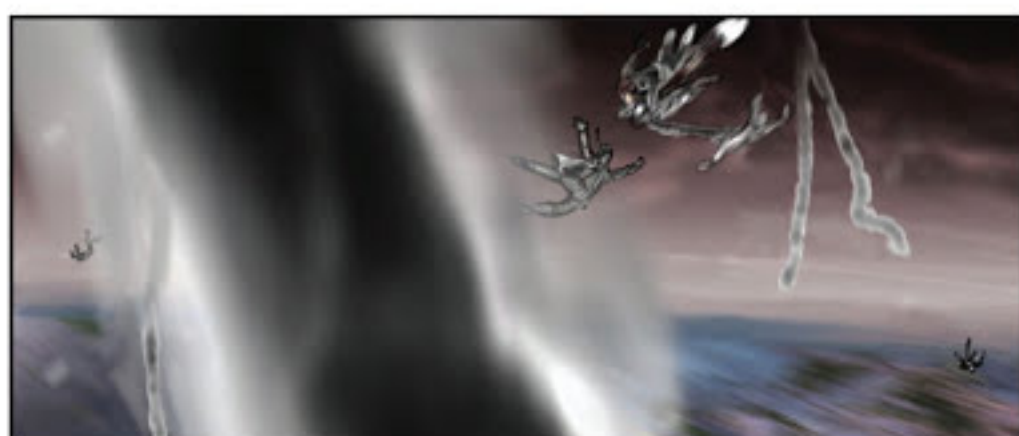
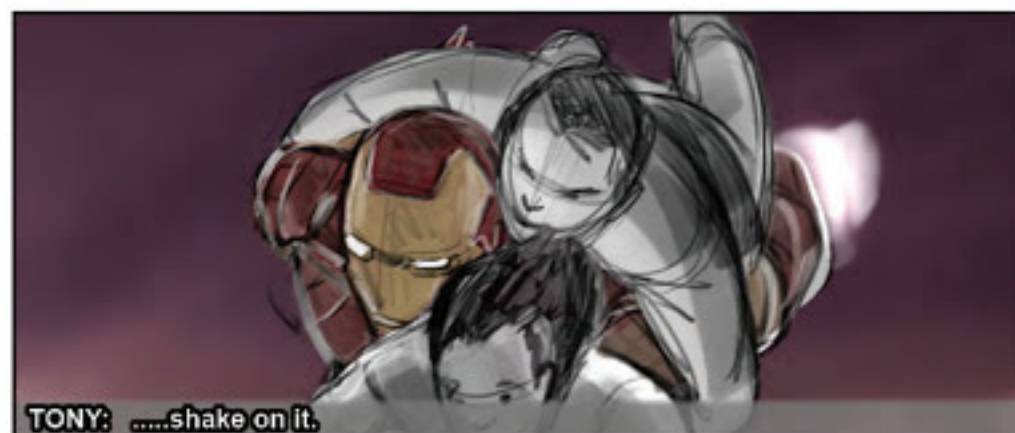
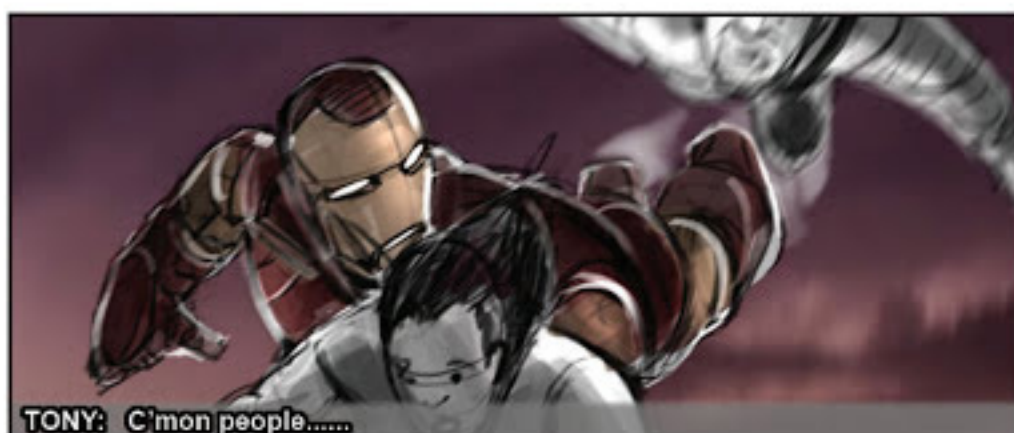
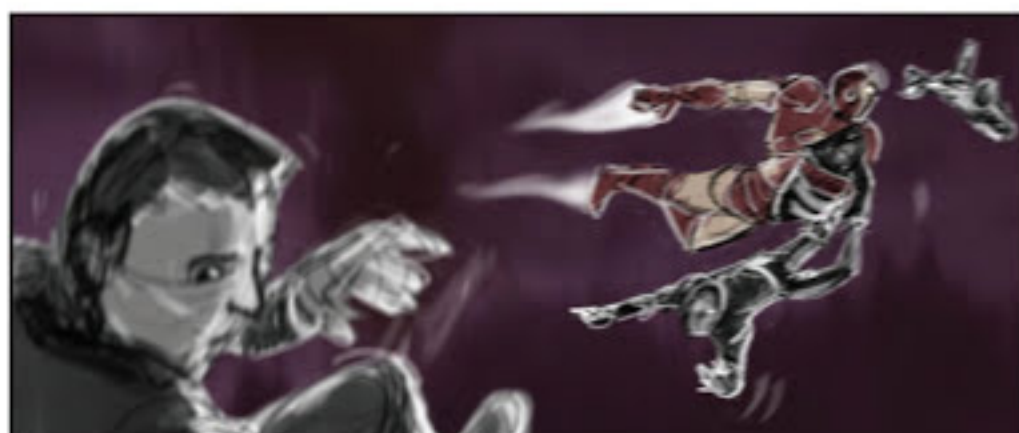
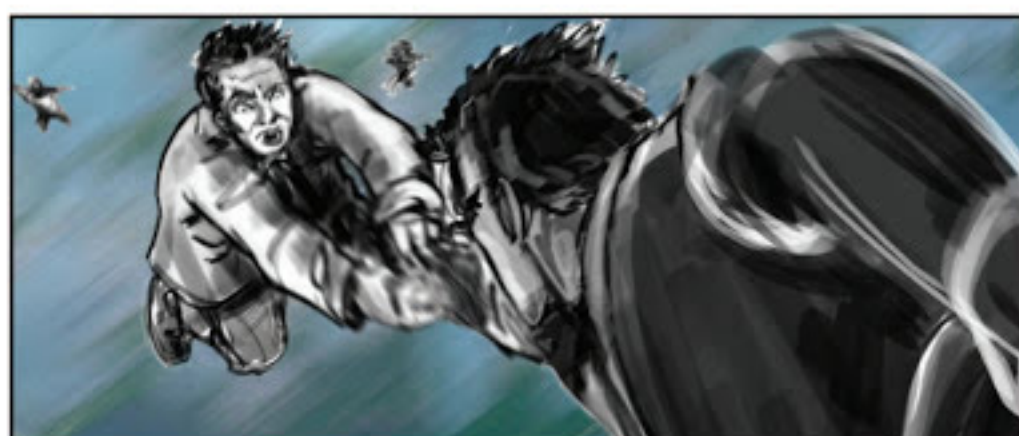
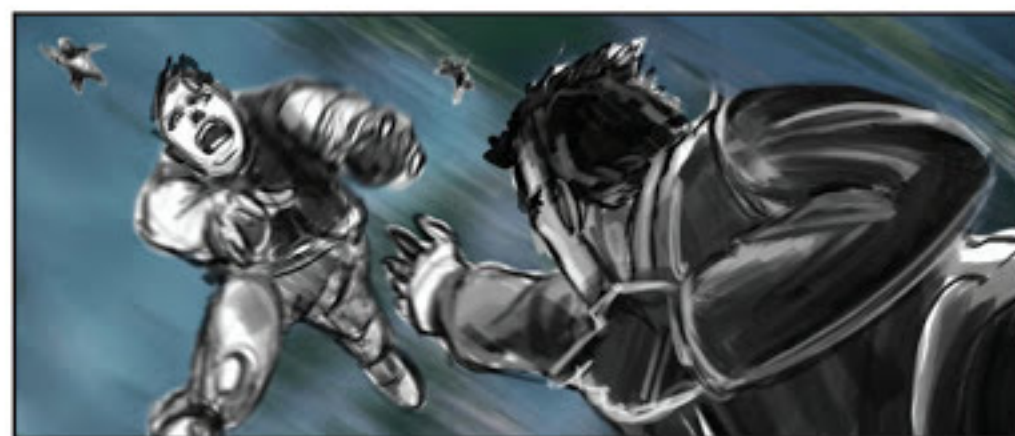
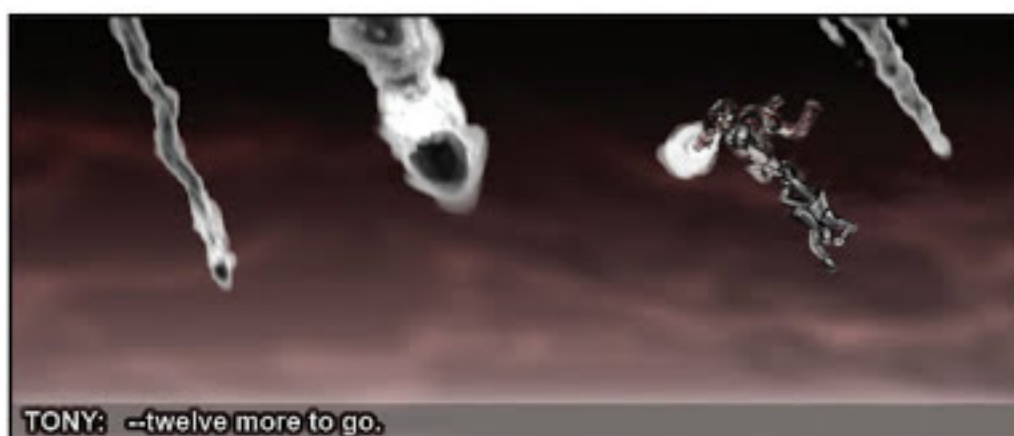
"The women had skirts on; the people were all different sizes. And of course you have to outfit all thirteen people at the same time, and have them appear to have no parachutes on! The actual parachutes could never be seen."

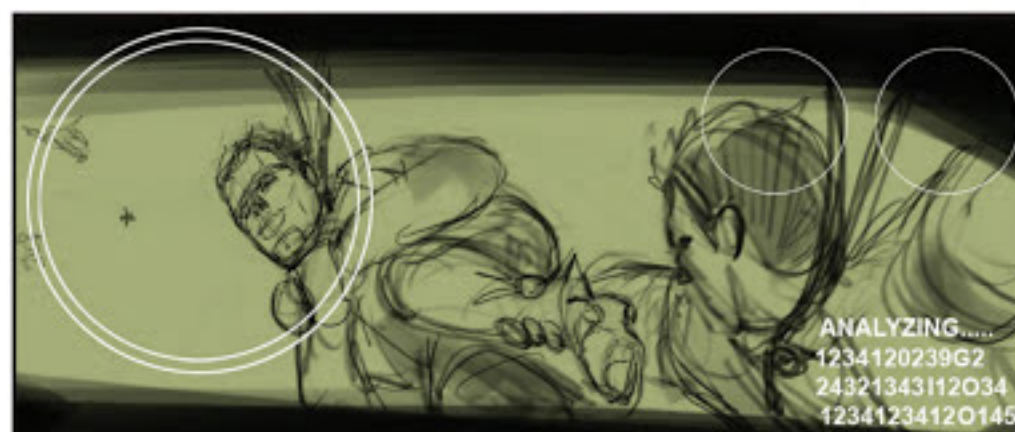
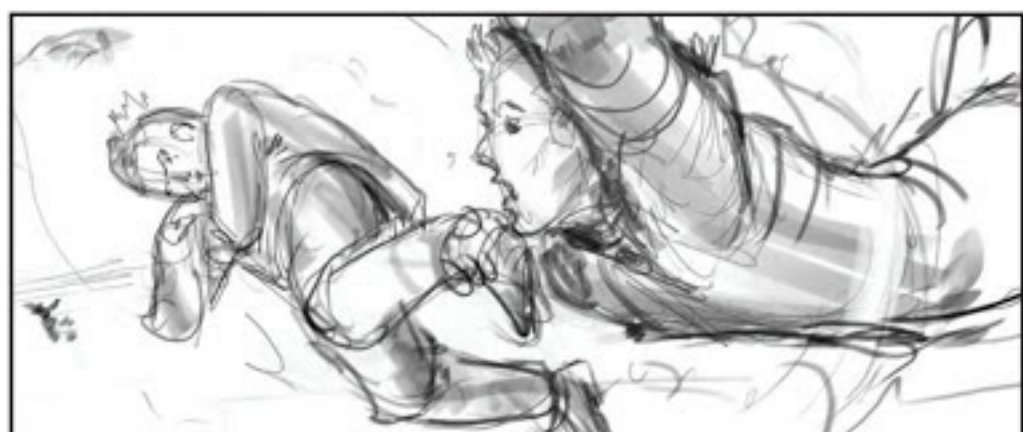
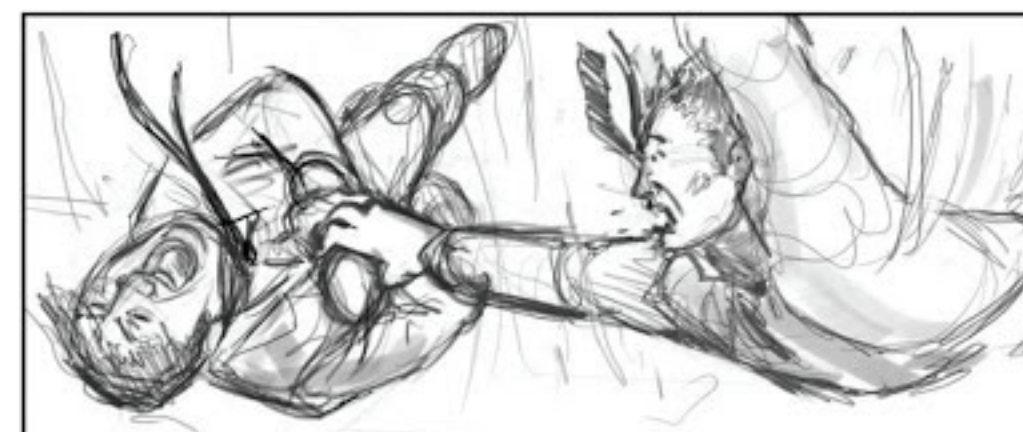
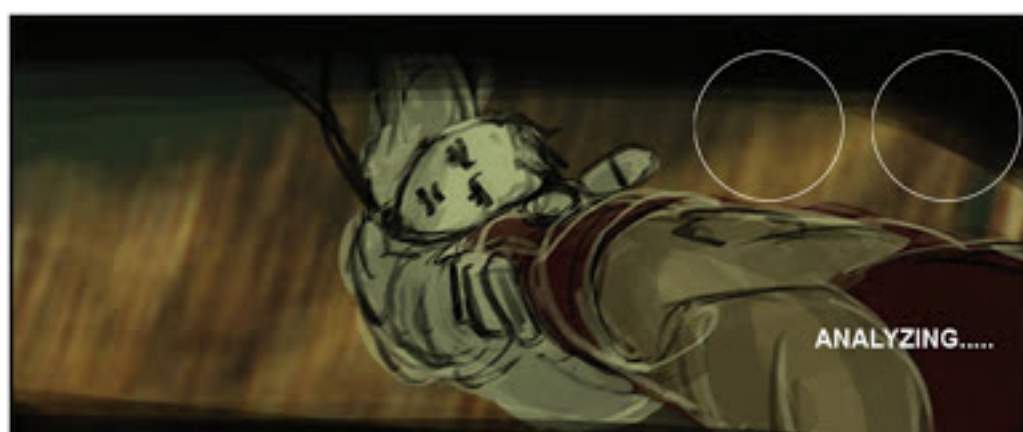
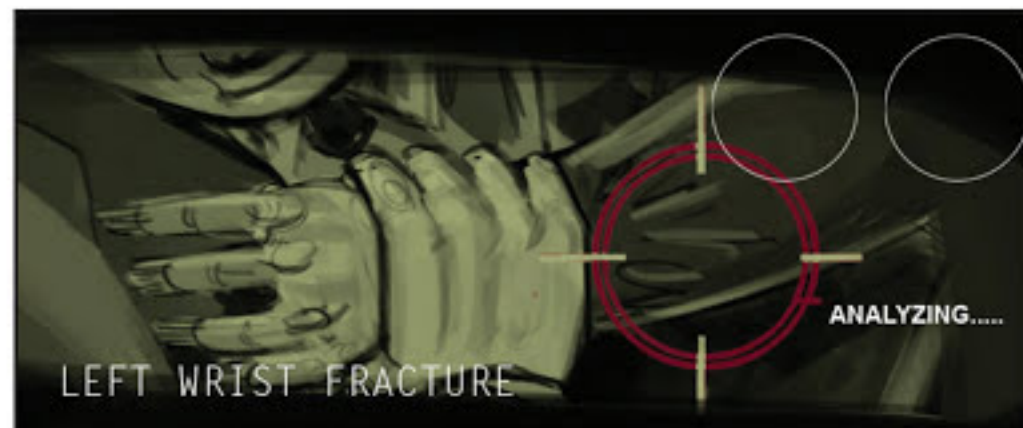
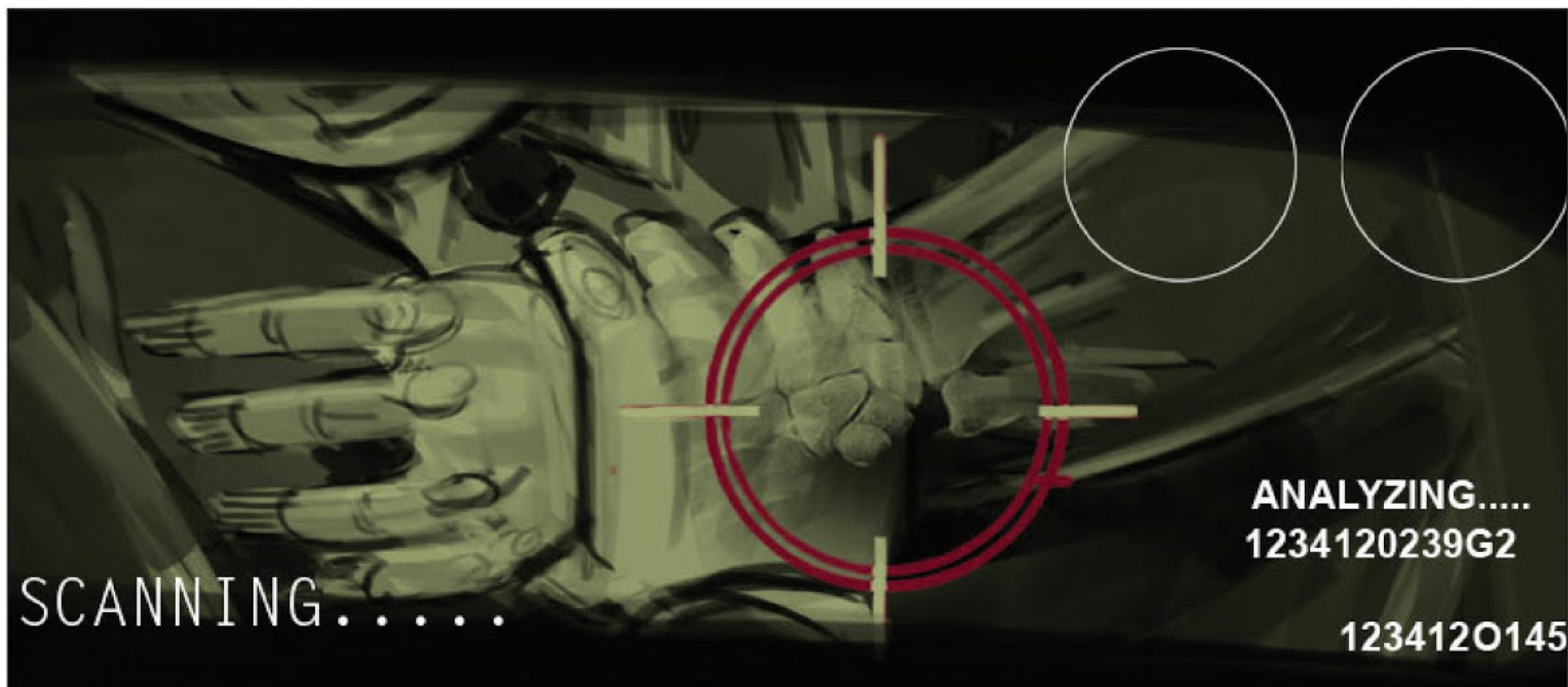
Second Unit Director Brian Smrz supervised the sequence: "We had a plan, but there were some things we weren't going to be able to do, so we had to suggest alternatives to get close to the previs. The actual skydive, for the 'Barrel of Monkeys' sequence, went relatively smoothly because Jeff put together a really incredible team, the Red Bull team of skydivers. Those guys are unbelievable."

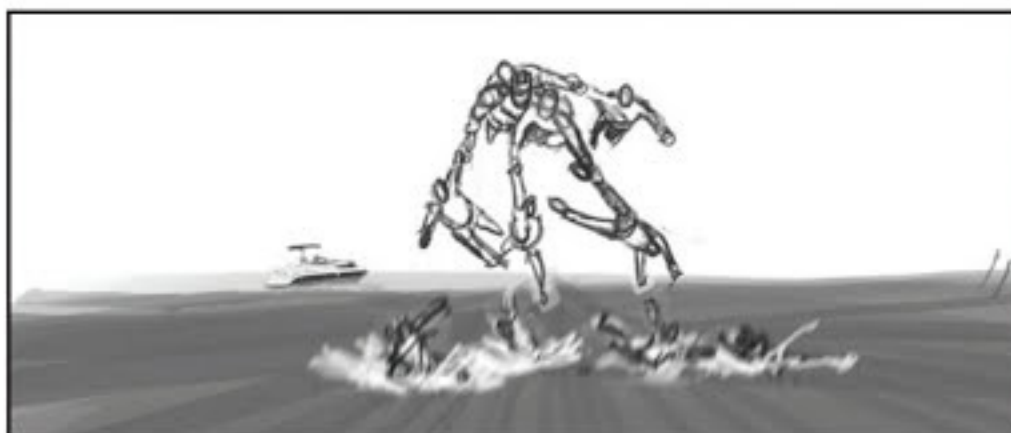
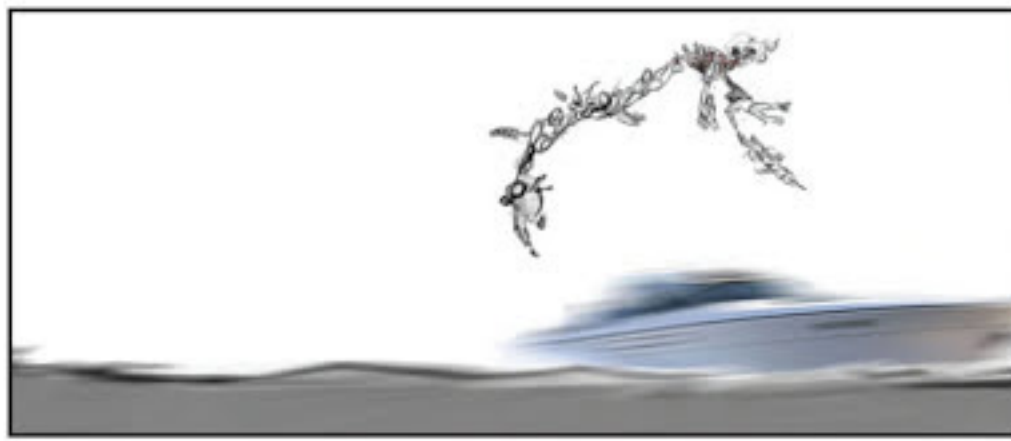
An important preparation stage was the dirt-dive: an earthbound simulation of the diving moves required for the scene. "You're rehearsing your moves, but on the ground," Smrz explains. "The cameraman and everybody stands on the ground as if they're

exiting the plane. The cameraman moves where he's going to go, and everyone moves around as if they're up in the sky. They'll sit there and watch that, talk about it and come up with a plan, and then they go up there and do it. It's never exactly what you planned just because of the dynamics of falling through the air, but they come pretty close. And then I reviewed the footage as soon as they landed, and we'd discuss what changes we could make, or we'd move on.

"We had a certain amount of time, so I only got one or two takes on each dive. Sometimes I'd take three tries if I thought something was important. But if I didn't get it in three at the most, I'd just punt and move on to something else. We knew we had a certain number of days, and we got lucky with the weather. So no real problems."







The trickiest part of the shoot was the ending, where Iron Man and his thirteen “monkeys” splash down into the water. “That was really complicated,” Smrz says. “A big, big rig with fourteen guys on cables—all having to fly together, hanging in different positions, and moving at the same pace as they were released into the water. But we had enough time to practice it, to slowly build up to it.”

Habberstad explains: “The drop was done on a 600-foot zipline. We had fifteen ziplines—one for each of the characters and Iron Man, and another for the camera. And we shot all these people on a 600-foot run, starting about a hundred feet in the air, zipping down and being dropped in the water one at a time.

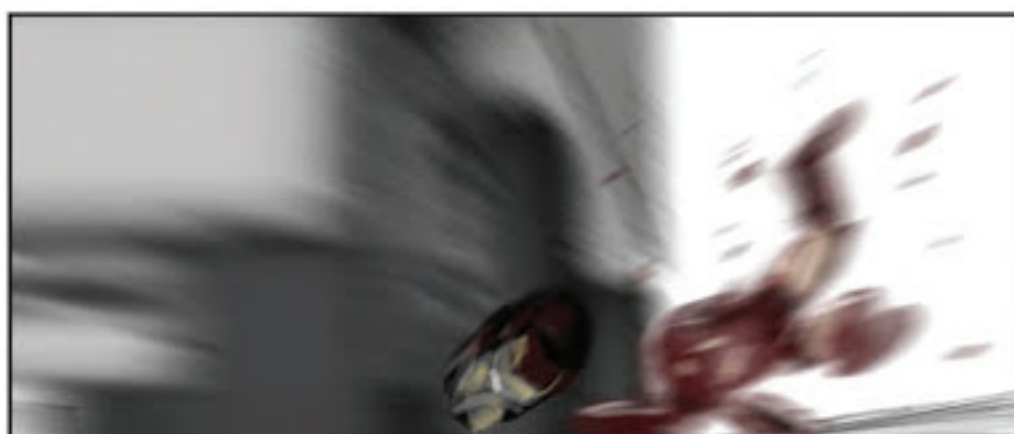
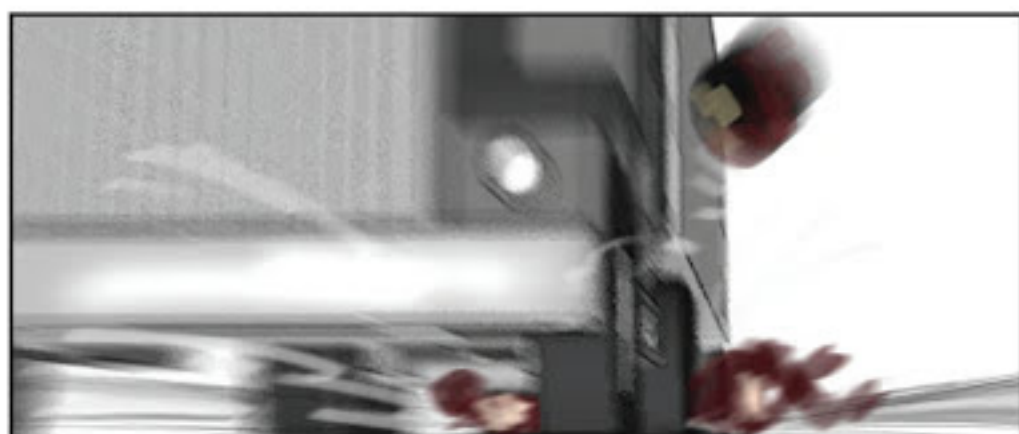
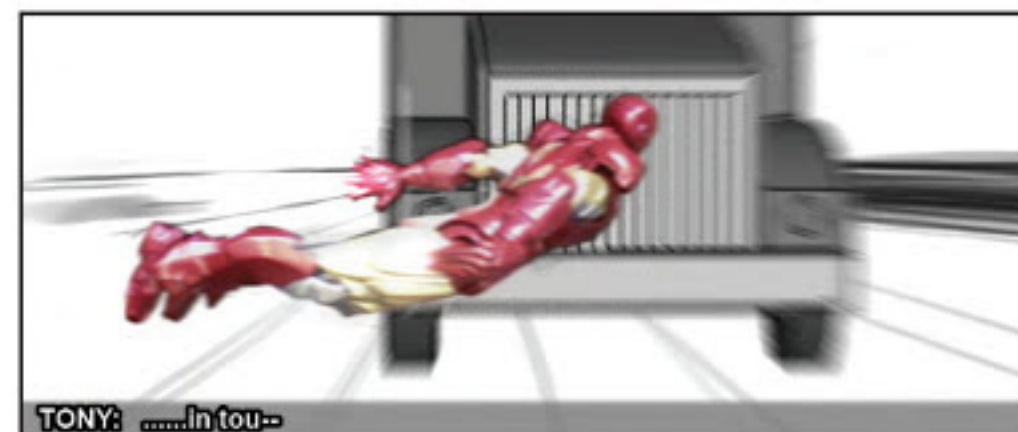
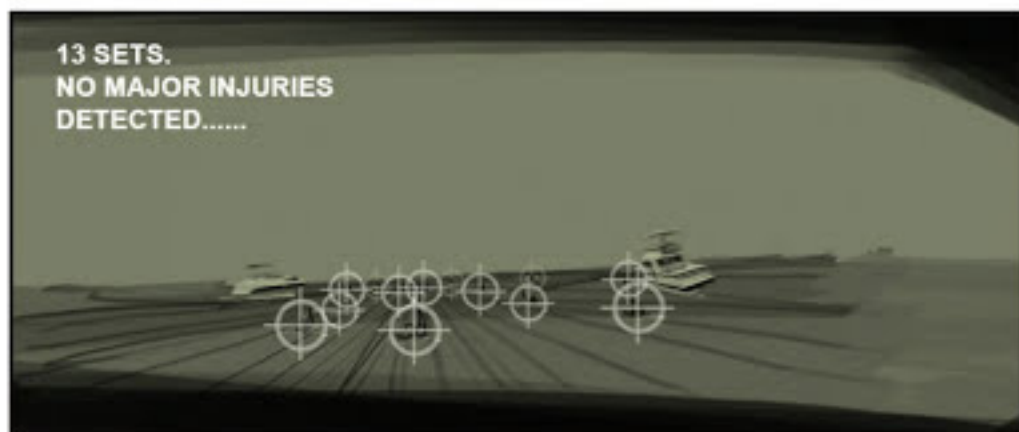
“There were a lot of details. We had about a thousand pairs of little clear goggles that people could wear, that wouldn’t be seen. If the people were going to be close to the camera, they could wear the goggles for the initial part of the jump. Then right before we’d

start rolling, they’d take the goggles off and get rid of them.

“We were jumping over the ocean, so everyone had to have emergency flotation gear in case they landed in the ocean. We had to design special, really low-profile flotation gear that could also be easily accessed, because we wouldn’t have a whole lot of time to get to it in an emergency.

“We had things like skirts flying up, and the gear had to be attached so the wind wouldn’t do that. Girls with high-heeled shoes would take the shoes off after the parachutes were opened and hold them in their hands. The hats pretty much flew off when the plane got blown open, so that wasn’t an issue.”

Smrz says the sequence was his favorite part of the film “mostly because it was a sequence that was designed, prepped, and executed as it was supposed to be.”



Daryldixon.gala100.net



"So all those pieces were built onstage," Brzeski says. "Weeks and weeks of time went into building the pieces on computer and doing previes of each individual fight piece, so we could see what we had to build. Because it was very expensive, and obviously we couldn't build a whole crane. Those are huge; they don't build soundstages big enough for them! When you drive by them, they look pretty big. But when you're actually in them, they're gigantic."

"We used a lot of steel to build the crane—extended metal, railings, and this and that. John Sampson, our construction manager, built all that stuff with welders. It was a big deal. The boat deck was just a piece of a real boat deck that was comped into a huge ship. So there was a lot of work that went on between all the different departments, trying to figure out what the fight would be and what you could build to make it happen."

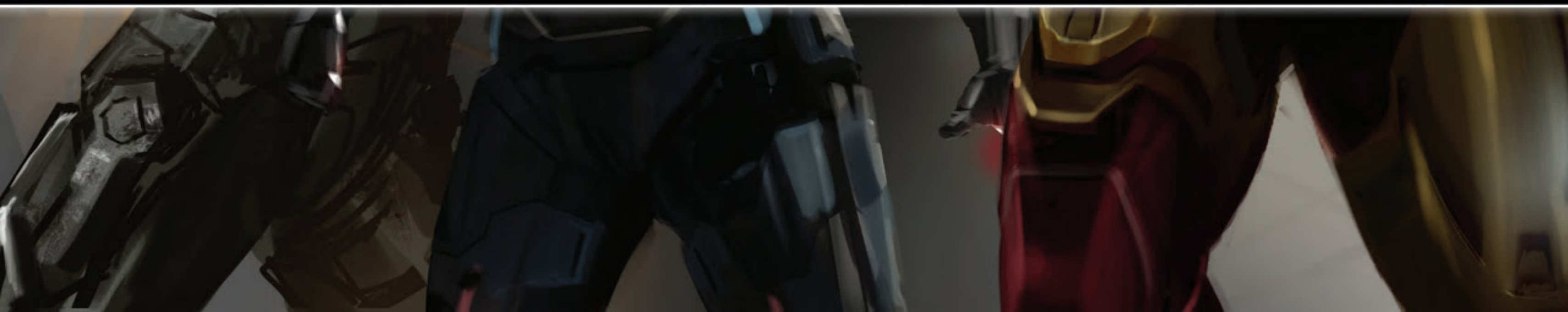






CHAPTER SIX

THE IRON LEGION





The climax of *Iron Man 3* brings together every piece of Iron Man gear in the Tony Stark catalog, all at once, against an army of genetically enhanced Extremis soldiers. The result is the biggest, wildest heavy-metal battle ever committed to film.

The first step in visualizing this epic conflict was the creation of keyframe art. “These illustrations were done very early in the film,” Concept Illustrator Rodney Fuentebella says. “In fact, most of the armors were still being designed when I got this assignment. One of the main purposes of these keyframe illustrations is to create a sense of mood and inspire the rest of the production

team in creating the final look. These days all the art is done digitally, to sketch a sense of action and staging. I created a rough 3-D mockup for some of the battle scenes before I painted them, to help me get an idea of the type of space I would like the battles to take place in.

“The Iron Legion flying into battle was a fun one. The drama of the multitude of armors all arriving to fight for Tony was an illustration I wanted to create when I first read the script. This is the arrival of Tony’s army and the first time the audience is seeing more than one armor in battle—which is very exciting to me.”



Art by Rodney Fuentebella.

MARK 1



MARK 2



MARK 3



MARK 4



MARK 5



MARK 6



MARK 7



THE IRON

MARK 13



MARK 14



MARK 15



SNEAKY
STEALTH SUIT

MARK 16



NIGHTCLUB
BLACK STEALTH SUIT

MARK 17



HEARTBREAKER
ARTILLERY-LEVEL RT SUIT

MARK 8



MARK 9



MARK 10



MARK 11



MARK 12



N L E G I O N

MARK 18



CASANOVA
STEALTH ARTILLERY-
LEVEL RT SUIT

MARK 19



TIGER
HIGH-VELOCITY
PROTOTYPE SUIT

MARK 20



PYTHON
LONG-DISTANCE SUIT

MARK 21



MIDAS
HIGH-ALTITUDE SUIT

MARK 22



HOT ROD
WAR MACHINE 2.0
PROTOTYPE

MARK 28



JACK
RADIATION-ZONE SUIT

MARK 29



FIDDLER
NIMBLE-CONSTRUCTION
SUIT

MARK 30



BLUE STEEL
SILVER CENTURION
SUIT UPGRADE

MARK 31



PISTON
HIGH-VELOCITY
CENTURION SUIT

MARK 32



ROMEO
ENHANCED-RT SUIT

N L E G I O N

MARK 38



IGOR
HEAVY-LIFTING SUIT

MARK 39



STARBOOST
SUBORBITAL SUIT

MARK 40



SHOTGUN
HIGH-VELOCITY SUIT

MARK 41



BONES
SKELETON SUIT

MARK 42



PREHENSILE SUIT

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Rodney Fuentebella keyframe.

Executive Producer Stephen Broussard breaks down the filming process: “We designed this entire sequence where Iron Man and Rhodey are running up and down these cranes trying to get to the president of the United States and Pepper Potts to save them. Meanwhile, all around them, an enormous battle is raging between thirty Iron Man suits and these human beings enhanced by Extremis. So Tony and Rhodey are fighting their way through this huge battle—sometimes in a suit, sometimes not in a suit.

“The first thing we did, like we do with a lot of our finales, is what’s called a previs—which is a rough, animated storyboard version of it, where you just tell the best version of the story you can. That’s where you play, and you make the action beats as cool as they can be, and you just kind of go nuts and make

a little mini-movie, a mini-cartoon—to make sure it’s something you think is awesome and befitting the finale of your movie.

“We spent a lot of time working on that with Shane Black—a lot of time standing around models with little dolls, running up and down stairs. Planning the beats, planning the storytelling, just getting it into a shape that made sense at a story level. Making sure we had that right.

“And then, once you have a rough version of that, you say, ‘How the heck are we going to do this?’ And you start breaking it down into the little pieces: stairs here, a catwalk there, concrete there. You start saying: What are we going to build, what are we gonna shoot on location at the cranes, what’s just pure green screen? What’s pure CG, because it’s all suit-and-sky stuff? It’s really a collage of all these little disparate pieces.”



rodney.f





rodney.f

Second Unit Director Brian Smrz recalls the experience: “We had very limited time to rehearse, because there was a lot of seaport traffic, and we didn’t know when it would come through. We had to be ready: We could only use *these* two cranes if a ship came in, or only one crane because there was going to be a ship here. We had to work around their schedule.

“So there was a lot of scrambling. The seaport people were really great guys, everyone was great, but it’s a working seaport. It’s not like we could say, ‘You get three weeks of prep, get all your stuff ready, and then go shoot it.’ I think we got a week—limited time.

“We got some good aerial shots. We did a really neat, big master shot where in theory there’s battles going on all around. It was a helicopter shot, and we had guys running and jumping off the end of this 200-foot tower—people falling off, leaping off, a lot of people just running around. We tried to incorporate some big, epic things into it, and then a lot of smaller jumping around.”







Josh Nizzi keyframe.



Fuentebella: “Creating the Iron Legion on the seaport illustrations was an exciting experience. I wanted to convey the epic craziness of all the armors against the enemies with Tony in charge, like a general in a pivotal battle.

“Having a chance to do illustrations of Iron Man was fantastic, but creating pieces with multiple armors was an

exercise in controlled chaos. I always wanted to show Tony doing something heroic, but also have moments for each of the armors. Some of the suits are winning the battles, and some are being beaten down or even destroyed. It was a joy to create these little fights in this grand final battle.”



Townsend recalls: “The first unit shot on the cranes for one day, with our actors on location. Then we recreated it on a stage set, or at least certain bits of it. We then recreated that environment *again* digitally and used that CG environment for all of those green-screen shots.

“In those shots where we used the practical photography, like helicopter shots—the second-unit establishing shots—we had to remove Wilmington in the distance, and make it look like we were on an island with a bridge and a distant landscape. So a lot of that stuff has had digital matte-painting work put in, as well as atmospherics.

“And then we’ve got the Extremis characters running around. They were originally going to be shot using stuntmen, but we ended up with CG digital doubles because so much of the environment is CG—digital characters that we created in the computer. We’ve got full digital characters out there, and we’re making them glow with the same Extremis effect established earlier in the movie. So whenever you see our principal actors fighting or walking or jumping or running, you’ll always see action going on behind them in the deep background, and all of that is CG.”

rodney f



Broussard: “A lot of what we did was take small pieces that we’d rebuild on green screen, and shoot the fight with Guy Pearce and Robert Downey Jr.; shoot Robert and Don Cheadle sneaking into the place and getting caught, and then all their suits arriving. You spend a lot of time on these tiny little corners of a set surrounded by green screen, and you start to go a little bit stir-crazy, because all you’re seeing is green screen.

“And you keep asking yourself, ‘Is this gonna work? Is this gonna work?’ But because you’ve thought it out so much, because you’ve basically storyboarded every moment, you’re just going shopping, getting every little piece you can. And then you go back and put it all together.

“A fabulous visual-effects company called Weta Digital is responsible for doing that sequence. They’re Peter Jackson’s company in New Zealand; they did some amazing work for us on *Avengers*. That same team, which was nominated for an Academy Award, is working on our finale. And those shots are spectacular. You start to realize, ‘Oh, hey, guys, it does look like we’re on the crane.’ You’re not just in a green-screen world—it looks real. It’s just incredible. I’m amazed when these shots come in. It just looks so real and lived-in. It’s amazing.”







rodney.f



Townsend adds: “Weta uses motion-capture tracking markers to actually track an actor’s performance. We’ve got seventeen companies in six countries working on the film, but Weta is doing the final battle.

“We’ve put together an incredible production team to wrangle all the different visual-effects companies throughout the world. My job is to review every single shot that comes in. I’m in a room for twelve to fourteen hours a day looking at images and giving comments, then giving those notes back to the different visual-effects companies, either through direct conference calls or just by emailing notes back to them.

“We’re working with companies here in L.A., as well, so it’s a pretty intensive effort by all of us. I’m guessing we have about a thousand people working on the visual effects.”

According to Fuentebella, the illustrations on these pages were designed to portray “the power of Extremis vs. the armors. I wanted to show that the Extremis characters are more than capable of battling the Iron Legion. Ryan Meinerding and I came up with various ways to visually show that the Extremis are powerful. The Iron Man armors are tough, as seen in the previous movies. We wanted to make sure the Extremis soldiers were a match for whatever Tony throws their way.”







Broussard: "I think it's the biggest finale an Iron Man."



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Manuel Plank-Jorge concept art.







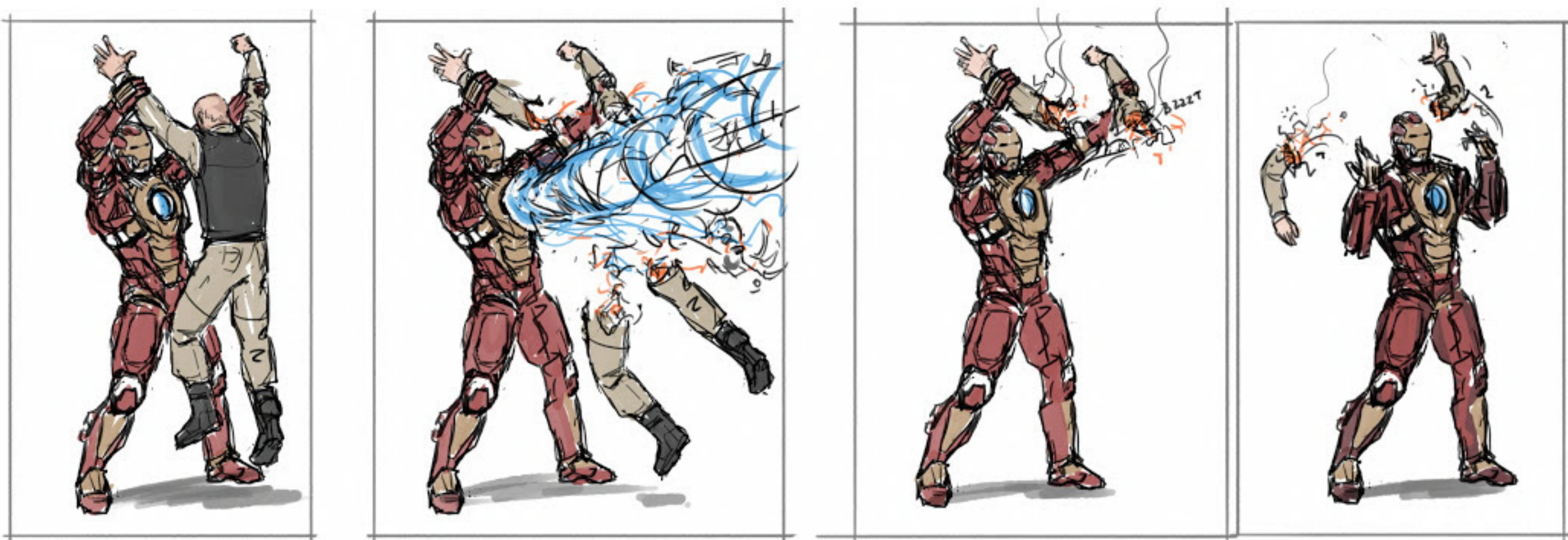
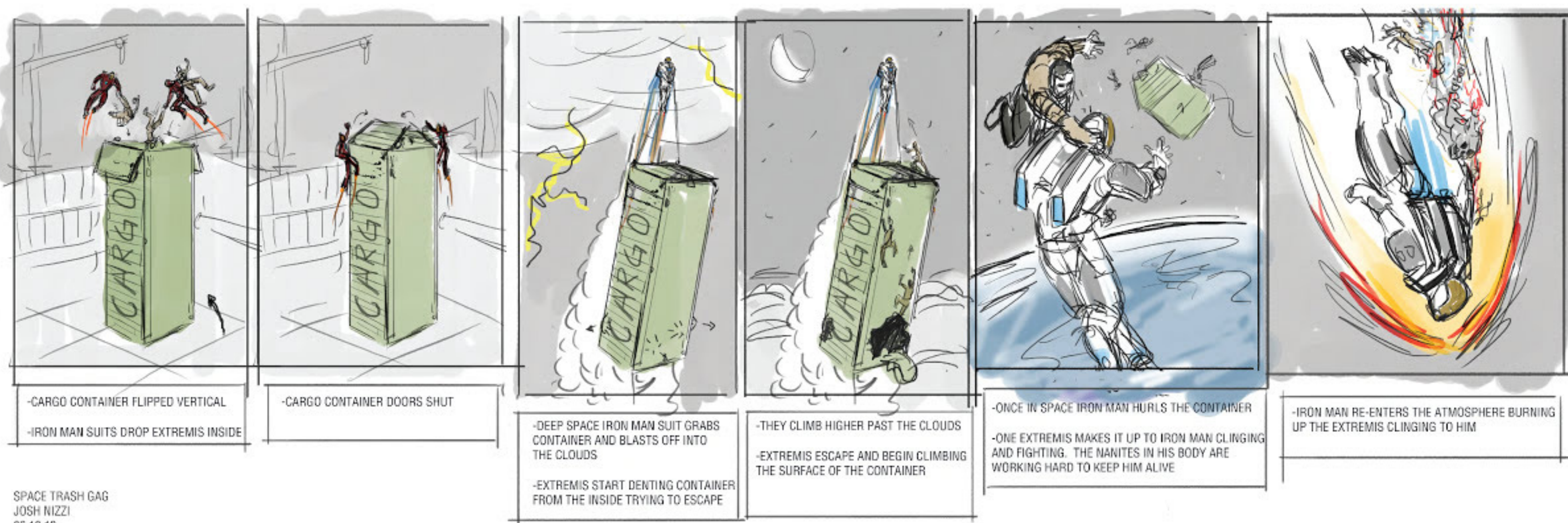




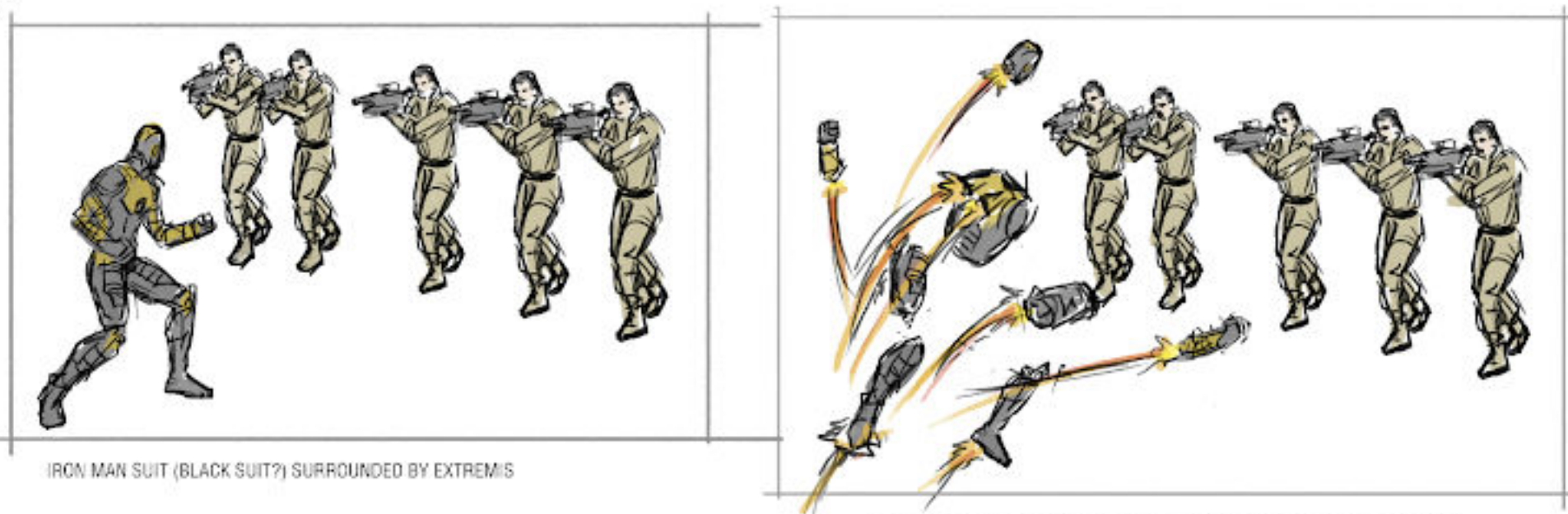
Creating the many suits of Iron Man armor was only the first step. The filmmakers then had to put each of them into motion, creating a series of individual action moves—"gags"—that made logical, entertaining use of each armor's unique abilities.

Senior Illustrator Josh Nizzi recalls: "My favorite gag is

definitely 'Divide and Conquer,' where a single suit takes out a squad of enemies by breaking into parts and attaching onto them. I especially like the part where the arms of the suit attach to an enemy and make him shoot his team, then punch himself in the face."



DIVIDE AND CONQUER SUIT GAG
JOSH NIZZI
06.21.12



IRON MAN SUIT (BLACK SUIT?) SURROUNDED BY EXTREMIS

SUIT DIVIDES INTO SEGMENTS, EACH FLYING OFF IN DIFFERENT DIRECTIONS



ARMS AND CHEST ATTACH TO ONE SOLDIER

SUIT MAKES SOLDIER SHOOT OTHERS NEAR HIM



SUIT DROPS WEAPON

CLENCHES FISTS

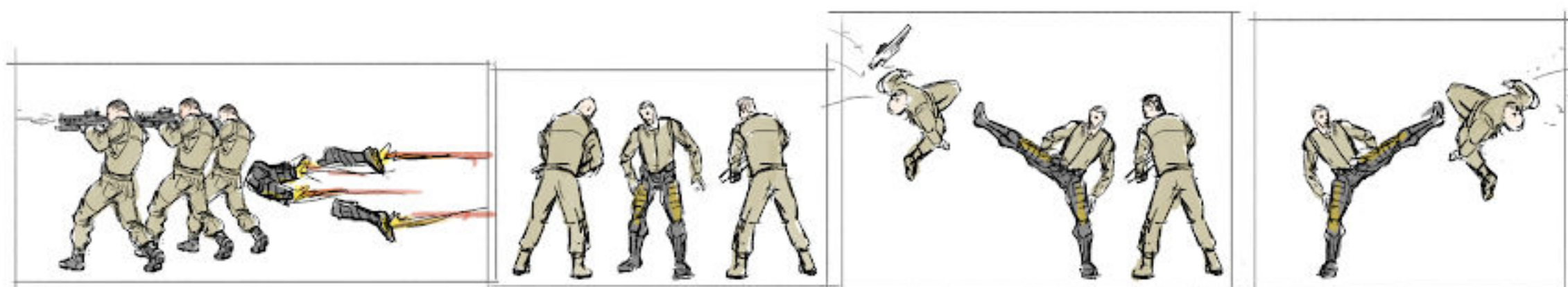
AND MAKES SOLDIER PUNCH HIMSELF IN THE FACE

STOP HITTING YOURSELF.

WHY ARE YOU HITTING YOURSELF?



HELMET ATTACHES TO SOLDIER SO HE CAN'T SEE



LEGS FLY INTO GROUP OF EXTREMIS SOLDIERS

ATTACHES TO ONE OF THEM

AND STARTS KICKING SOLDIERS NEAR HIM

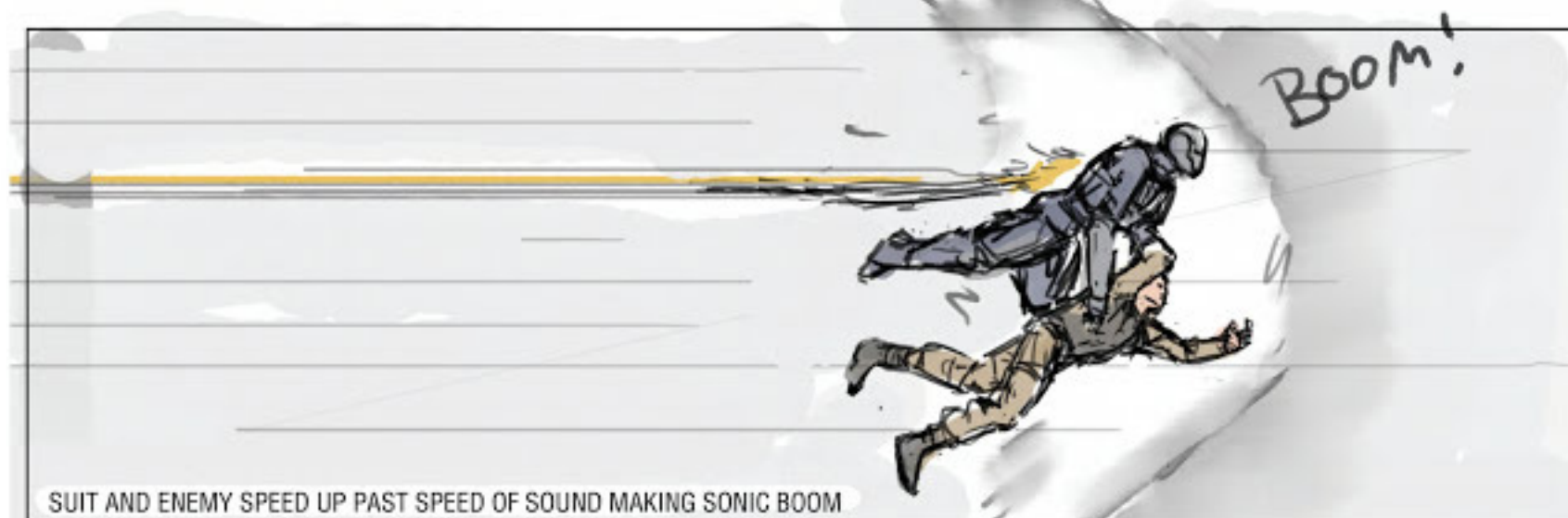
GRAB N SMASH GAG
JOSH NIZZI
12.06.20



EXTREMIS ENEMIES FIGHTING IRON MAN SUIT



HYPER VELOCITY SUIT SWOOPS IN AND GRABS AN ENEMY



SUIT AND ENEMY SPEED UP PAST SPEED OF SOUND MAKING SONIC BOOM

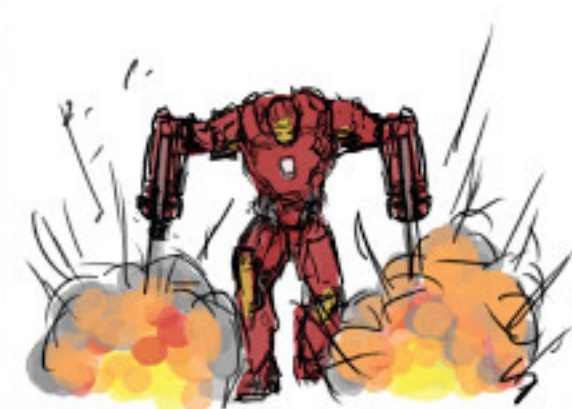
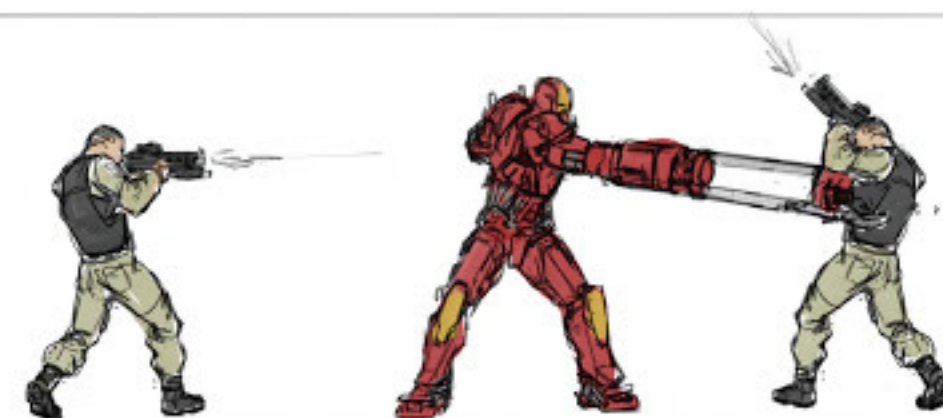


EXTREMIS ENEMY TOSSED INTO WALL AS SUIT PULLS UP



EXTREMIS QUICKLY OVERHEATS AND EXPLODES

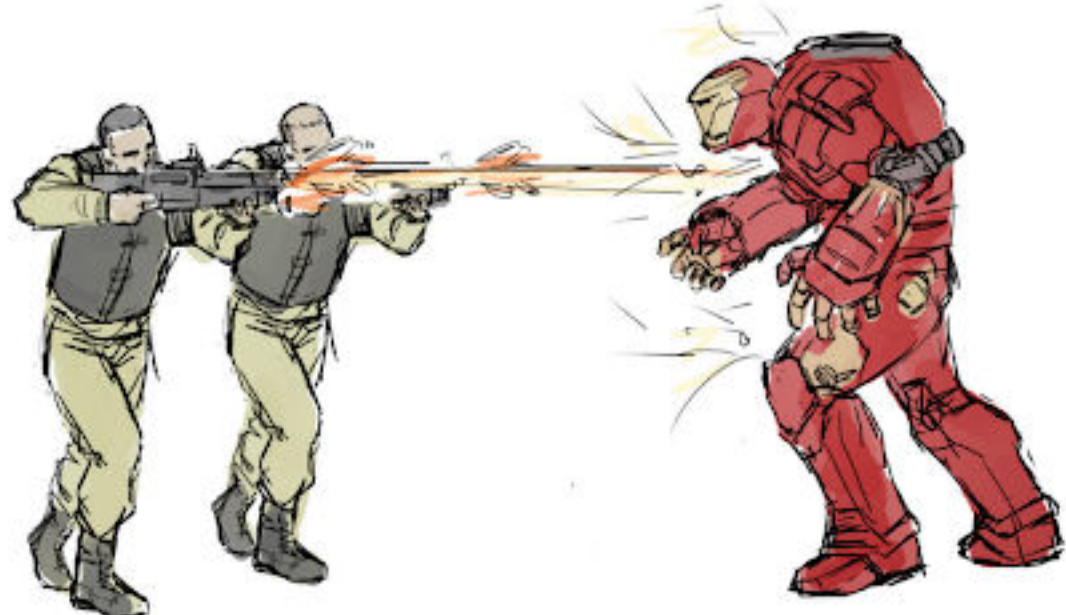
PISTON BEAT DOWN
JOSH NIZZI
12.06.21



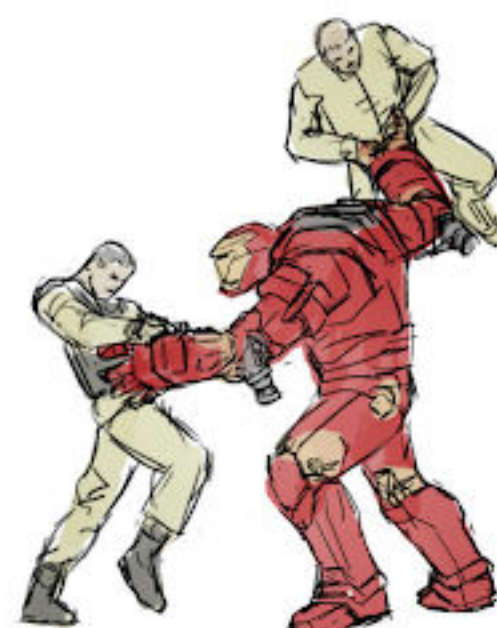
EXTREMIS SKEET SHOOTING GAG

JOSH NIZZI

06.22.12



IGOR SUIT WALKS THROUGH GUNFIRE
STRAIGHT AT EXTREMIS



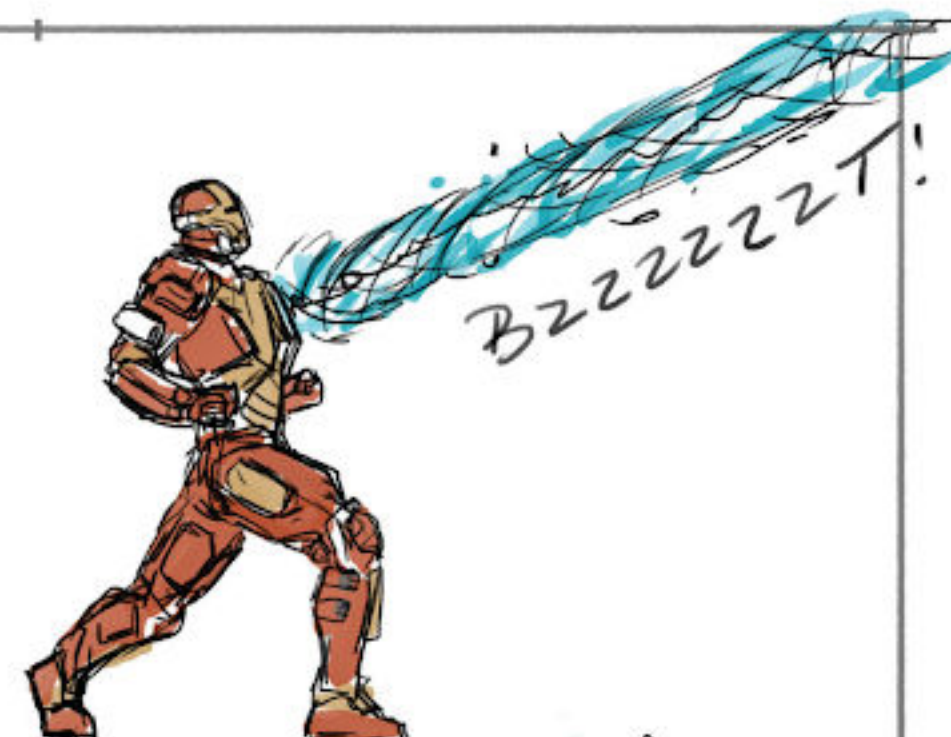
GRABS ONE ENEMY IN EACH HAND



HEARTBREAKER CHEST CHARGES UP



IGOR TOSSES EXTREMIS INTO THE AIR

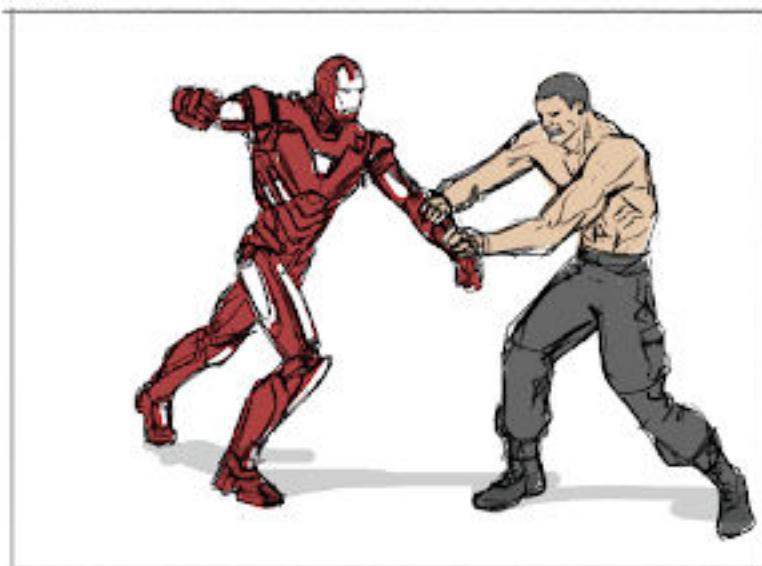


HEARTBREAKER BLASTS THEM WITH HIS CHEST BEAM

“I came up with around 20 different gags,” Nizzi says. “And surprisingly, most of them made it into the film. I pulled from all kinds of stuff for inspiration—but

mostly just tried to imagine what kind of action I would find entertaining, and what would make the suits look cool and unique.”

JUST A SCRATCH SUIT GAG
JOSH NIZZI
06.29.12



REMOTE CONTROLLED IRON MAN SUIT FIGHTS EXTREMIS SOLDIER



SOLDIER RIPS OFF SUIT ARM



SUIT KEEPS FIGHTING



SOLDIER RIPS OFF OTHER SUIT ARM



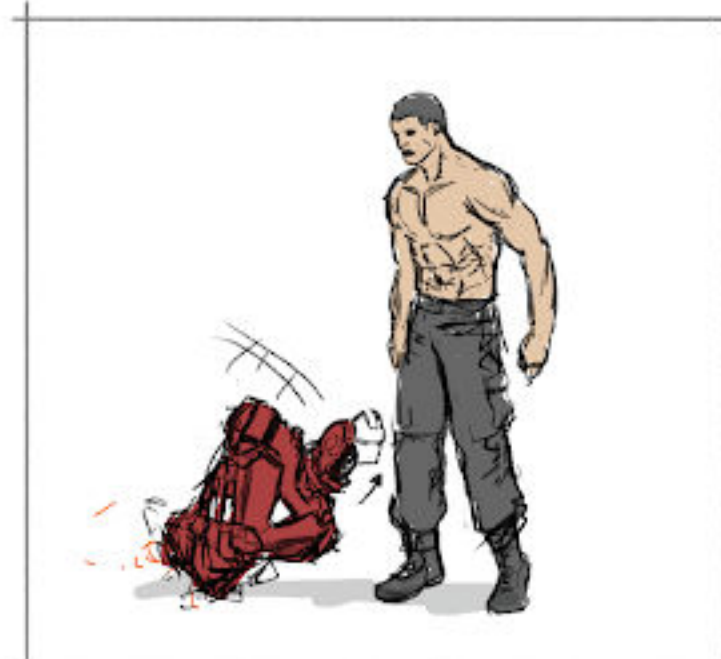
SOLDIER RIPS OFF ONE LEG



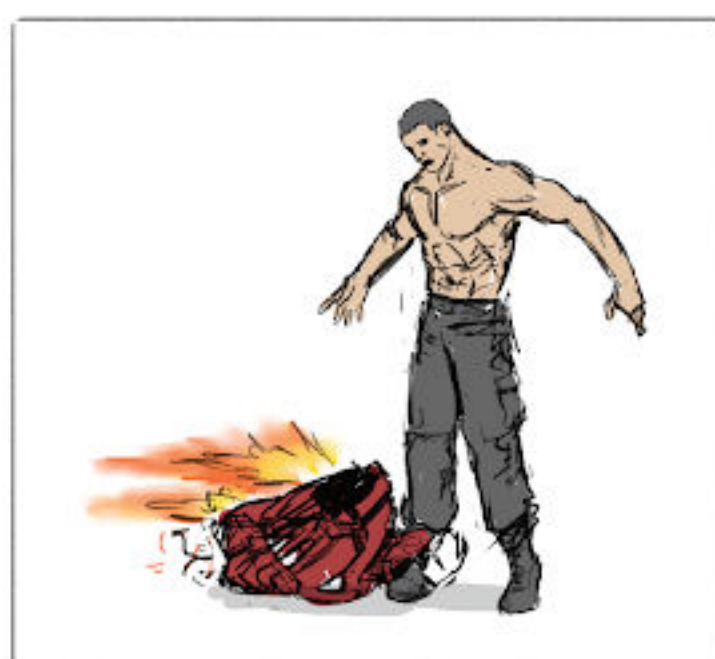
AND THE OTHER LEG



ALL THAT'S LEFT IS THE TORSO AND HEAD



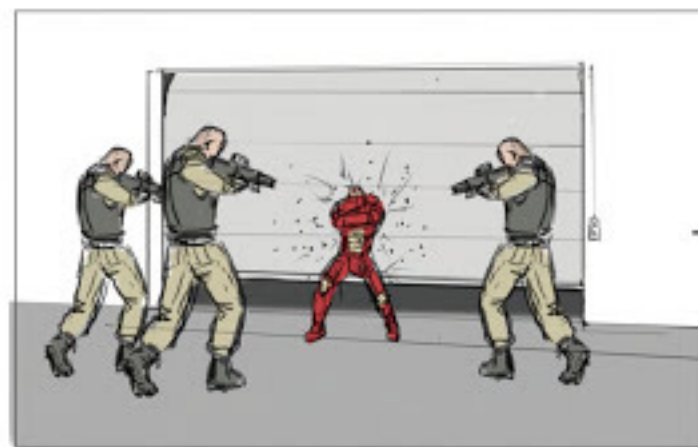
SUIT HELMET OPENS UP AND CLAMPS DOWN ON SOLDIER'S FOOT



SUIT FIRES UP BACK THRUSTERS



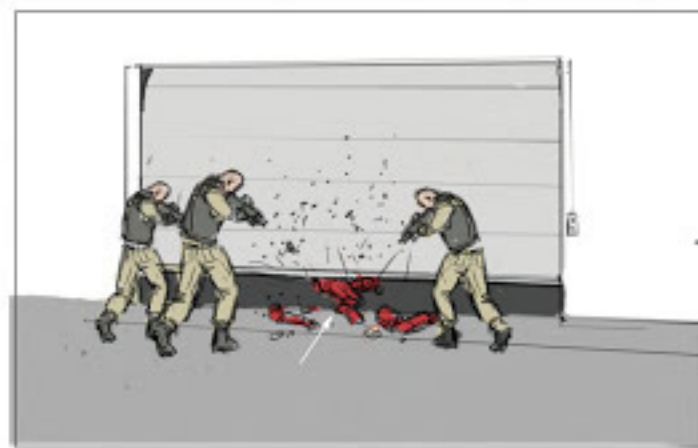
AND BLASTS OFF WITH SOLDIER



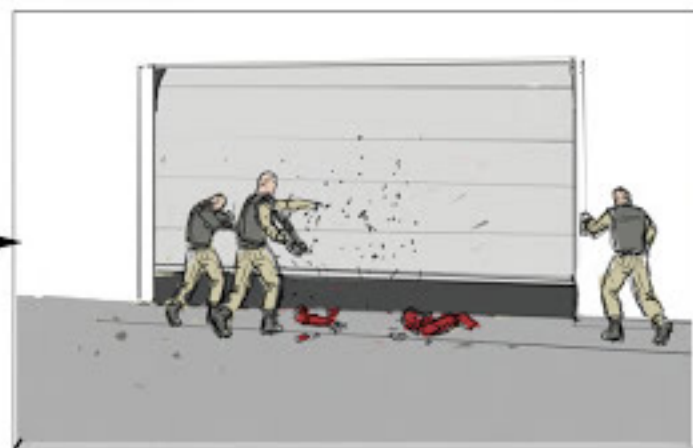
IRON MAN SUIT TRYING TO DEFEND AGAINST HEAVY ATTACK



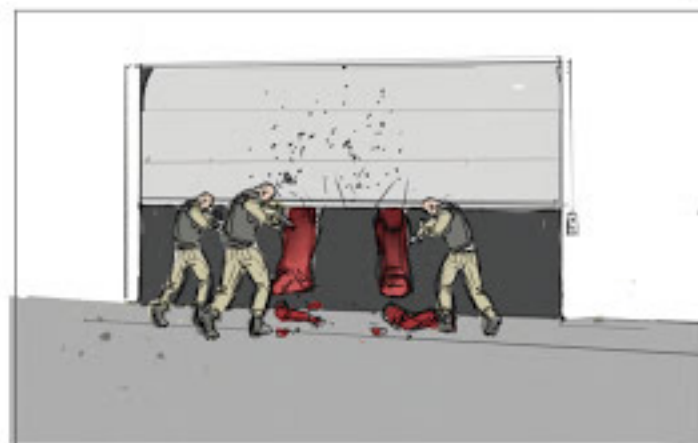
SUIT FALLS TO ITS KNEES WITH PARTS GETTING BLASTED OFF



SUIT CRAWLS UNDER SMALL OPENING IN LIFT DOOR



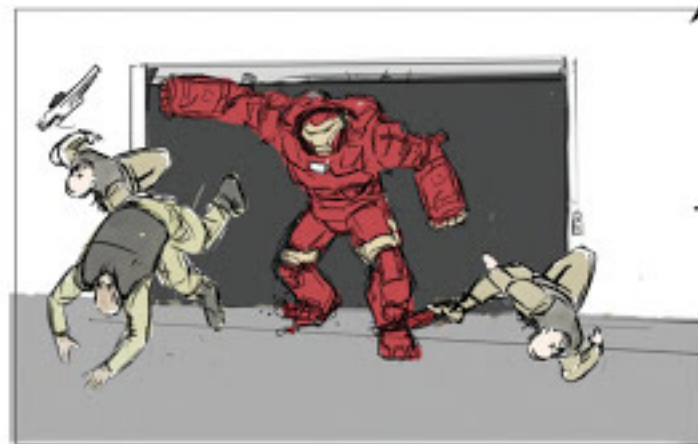
ENEMIES OPEN LIFT DOOR TO PURSUE INJURED SUIT



DOOR RAISES REVEALING HUGE IGOR SUIT



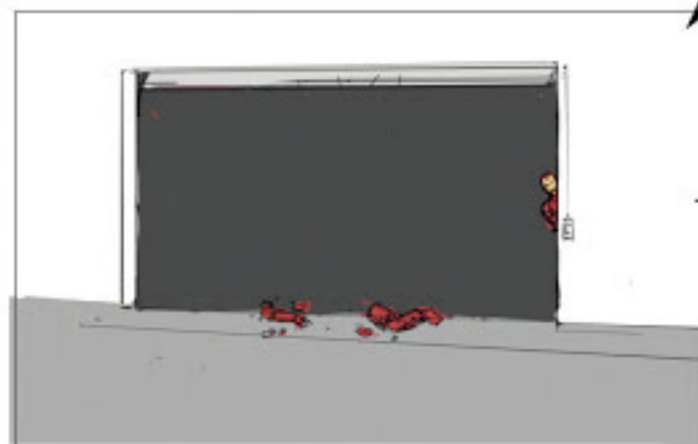
ENEMIES ARE STARTLED AS SUIT CHARGES OUT AT THEM



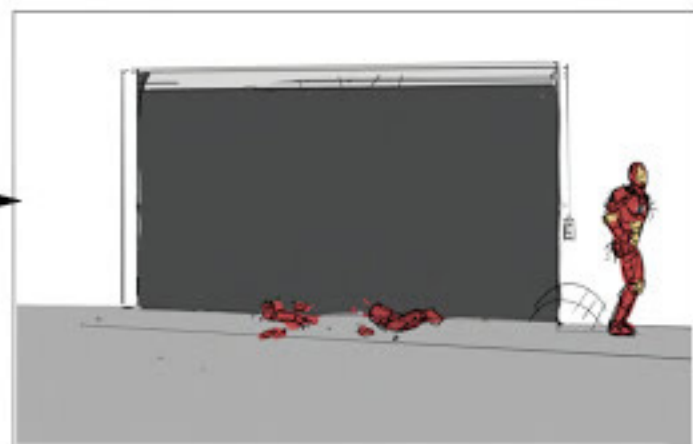
IGOR SUIT KNOCKS THEM ALL BACK IN A SINGLE BLOW



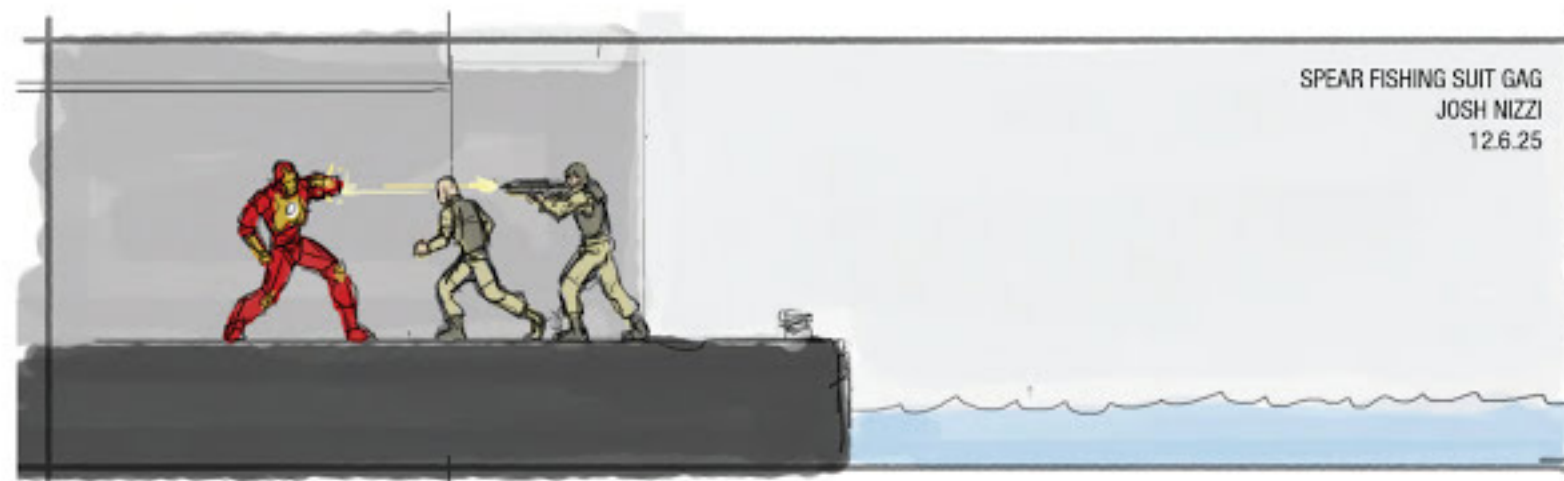
AND CONTINUES OFF INTO BATTLE



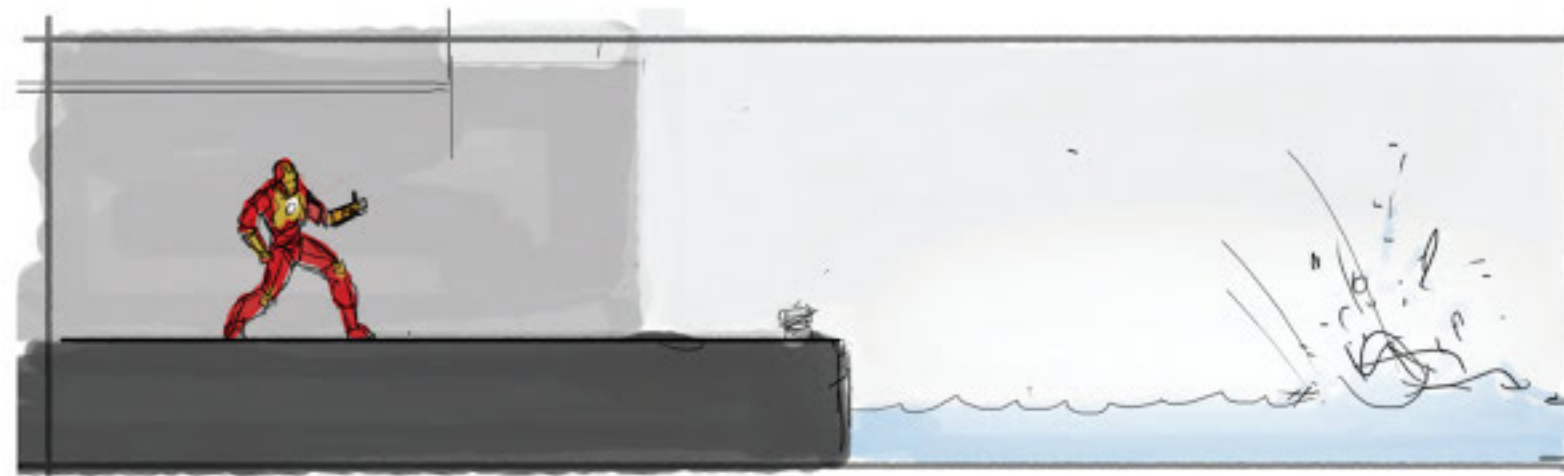
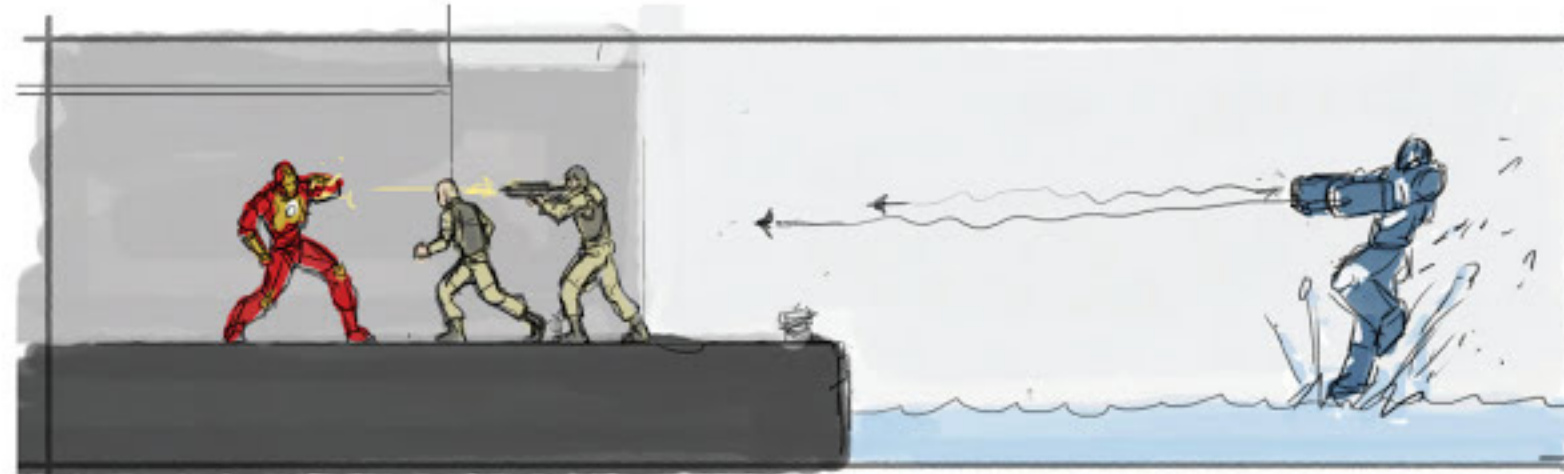
DAMAGED SUIT PEEKS OUT

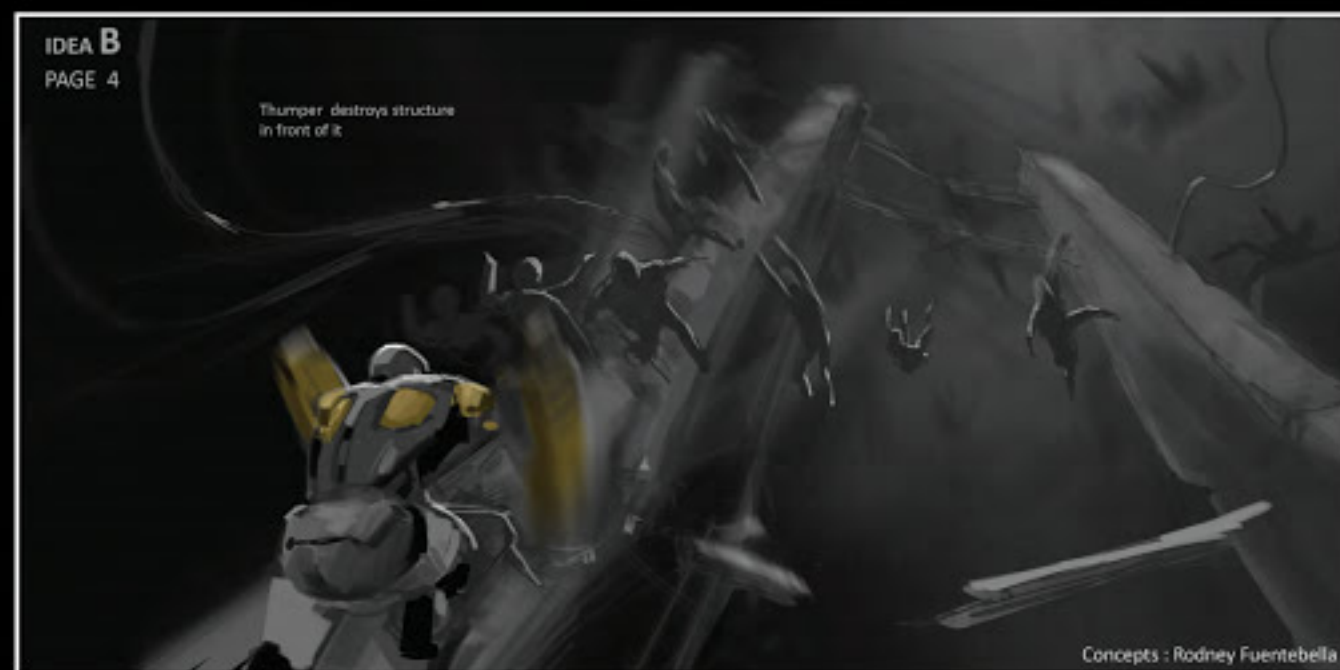
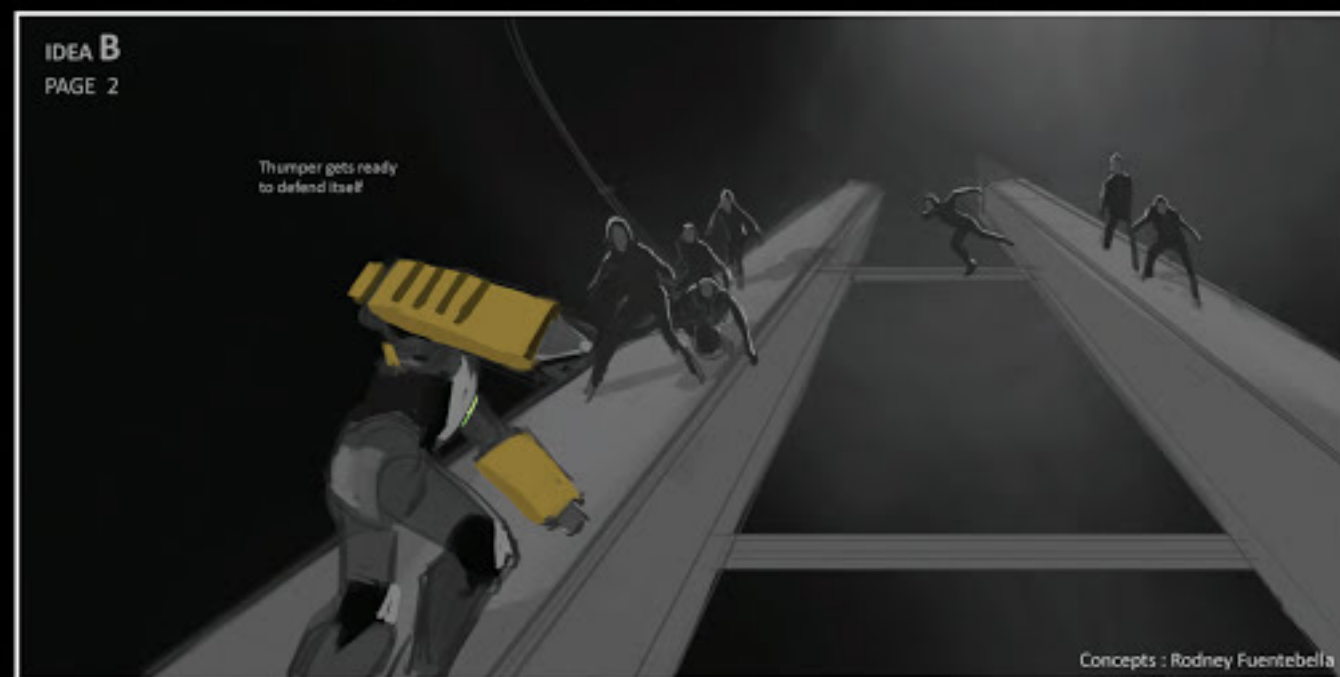


AND HOPS AWAY IN THE OTHER DIRECTION



SPEAR FISHING SUIT GAG
JOSH NIZZI
12.6.25





IDEA C
PAGE 1



Extremis guys patrolling as
the wall behind them starts
to crack

Concepts : Rodney Fuentebella

IDEA C
PAGE 2



Wall cracks more

Concepts : Rodney Fuentebella

IDEA C
PAGE 3



Wall explodes
collapsing on
Extremis

Concepts : Rodney Fuentebella

IDEA C
PAGE 4



Concepts : Rodney Fuentebella

IDEA F
PAGE 1



Extremis about to attack Thumper
on top of a metal catwalk

Concepts : Rodney Fuentebella

IDEA F
PAGE 2



Thumper pounds down on the
catwalk destroying the structure
in front.
Some Extremis leap
towards Thumper

Concepts : Rodney Fuentebella

IDEA F
PAGE 4



Extremis guys are about to
attack Thumper.
Thumper readies itself

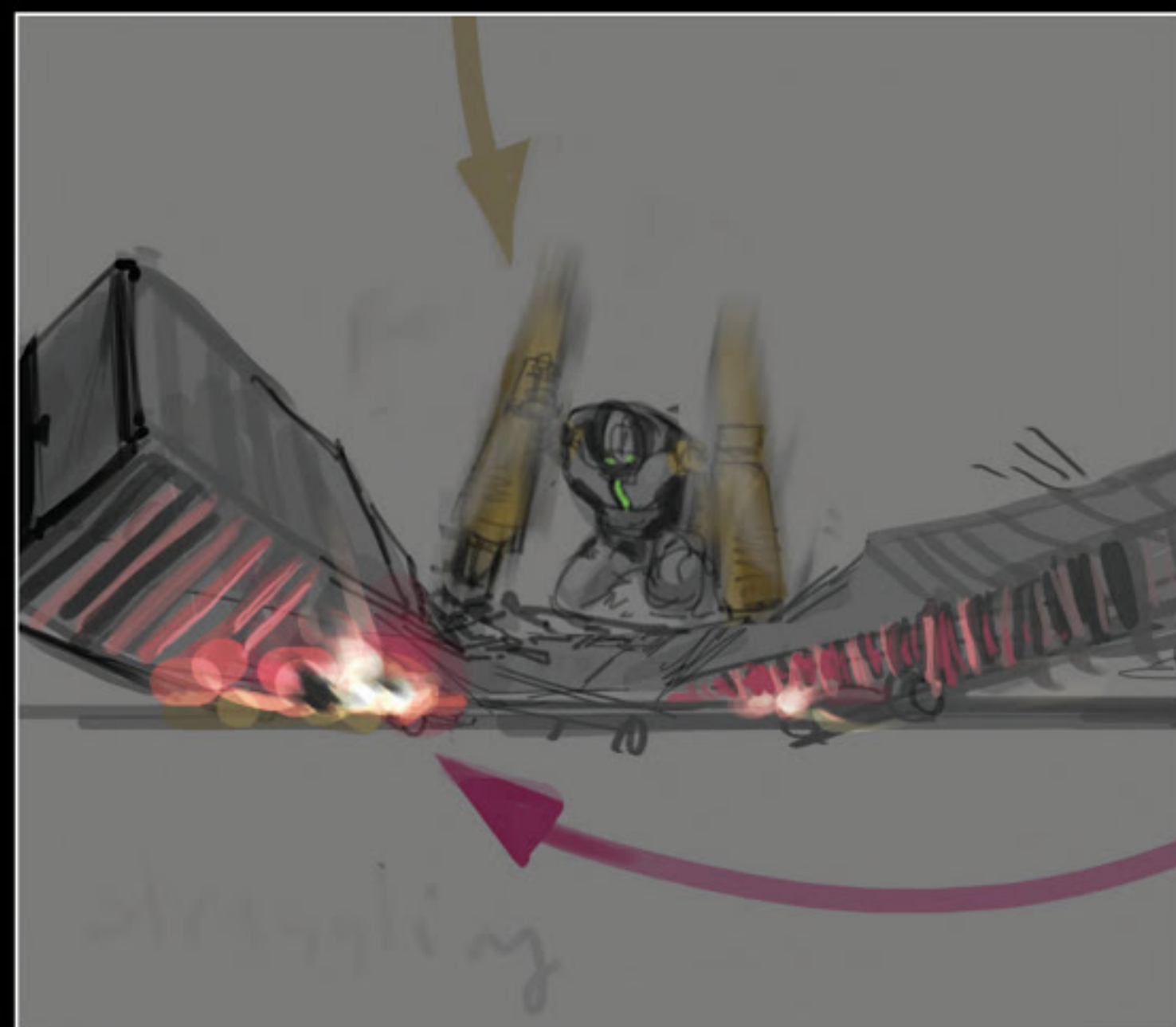
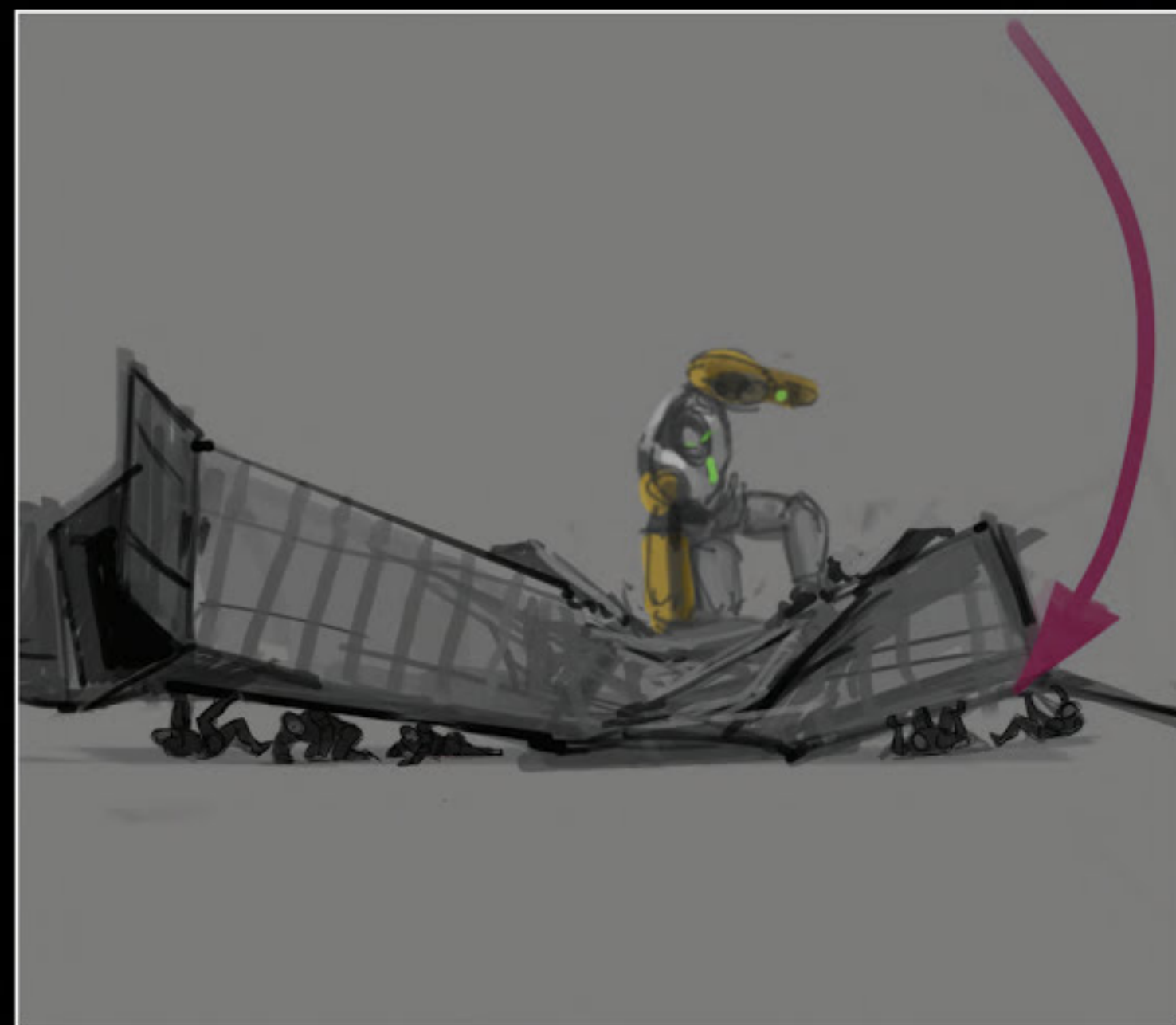
Concepts : Rodney Fuentebella

IDEA F
PAGE 5



Thumper punches metal
piece hard, tossing the
Extremis guys to oblivion.

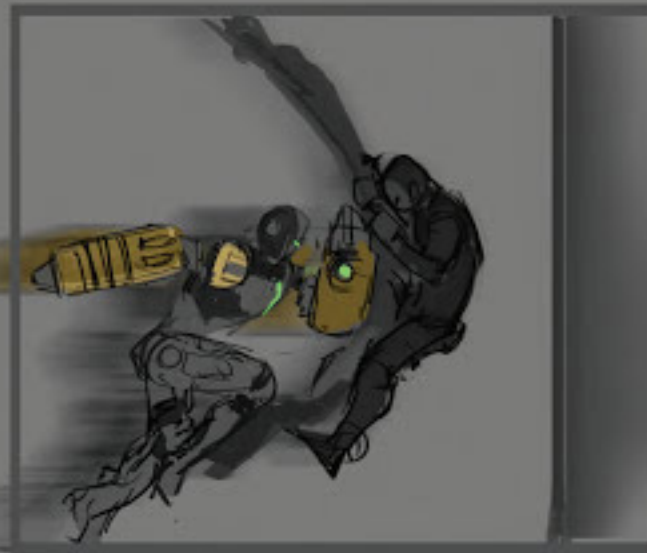
Concepts : Rodney Fuentebella



Rodney Fuentebella concept art.

IDEA E

PAGE 1



Thumper pins Extremis
against wall and metal plate



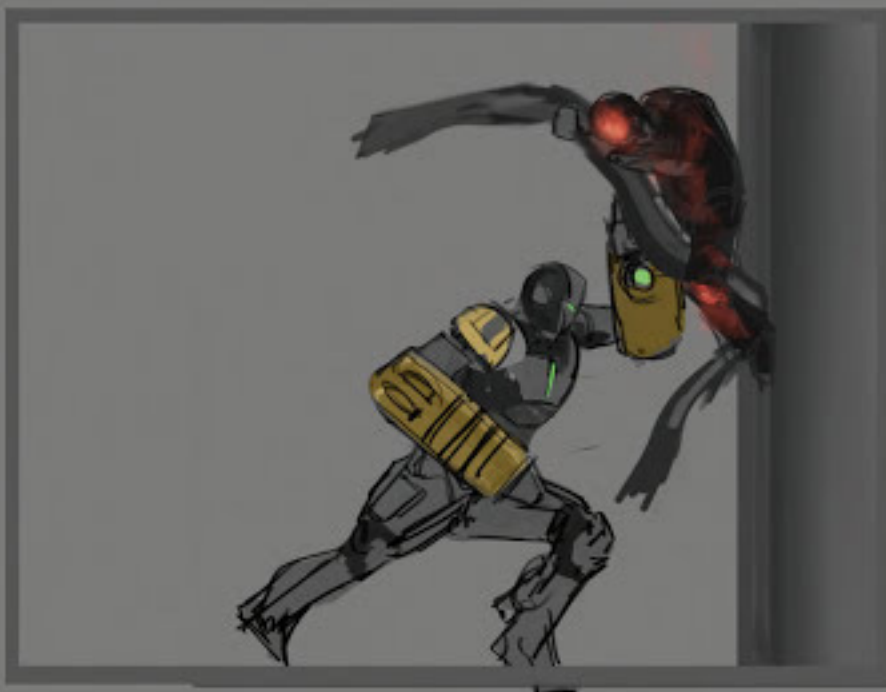
Thumper pounds
again and again



Thumper pounds through metal
plate damaging Extremis utterly

IDEA E

PAGE 2





CHAPTER SEVEN

MARKETING IRON MAN 3





In 2006, Marvel prepared to release its first-ever self-produced film. The company knew it had to make a splash at Comic-Con International: San Diego, the traditional launching place for sci-fi genre films. So a series of special posters and giveaways was prepared, along with an exclusive preview reel.

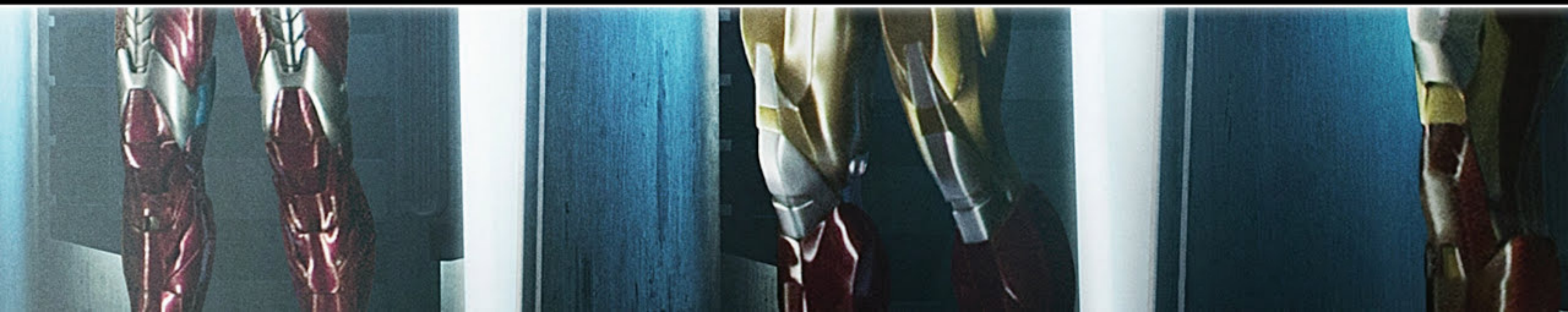
That film was *Iron Man*. The fans loved it—then the world loved it—and the rest is history.

The fans and viewers who attended Comic-Con that year helped make that first Iron Man film a record-breaking success. In 2012, as the cast and crew of *Iron Man 3* prepared to release the trilogy's climax, they returned to Comic-Con—presenting panels and a teaser poster that hinted at both Tony Stark's new Mark XLII capabilities and the dire situation in which he'd soon find himself.

But the expectations for *Iron Man 3* in 2013 had been redefined in

light of the tremendous success of not only *Iron Man* and *Iron Man 2*, but also *Marvel's The Avengers*—one of the biggest blockbusters of all time. And a successful promotional campaign doesn't just get the word out. It teases and hints at what viewers will see without giving away the film's key dramatic moments or plot reversals before it's released. Fans want to know more, but don't want to know so much that the element of surprise is lost. Promoting *Iron Man 3* without giving too much away becomes a balancing act for everyone involved.

Iron Man 3 is a special film. It's the culmination of the company's original vision for a cinematic Marvel Universe, a bringing-to-life of a rich world of intricate character interactions and heroic-yet-flawed complex personalities. The promotional campaign had to live up to high expectations, and the artwork on the following pages shows several of the steps the designers followed to reach that point.





Limited-edition collectible poster by Ryan Meinerding, San Diego Comic-Con 2012.

"I did this teaser poster for San Diego Comic-Con, to show the idea of Tony being on the run and in danger," Visual Development Supervisor Ryan Meinerding says. "His suit is mostly malfunctioning and he only has part of it, plus he is surrounded."

PRODUCTION CONCEPT ART
RYAN MEINERDING
2012

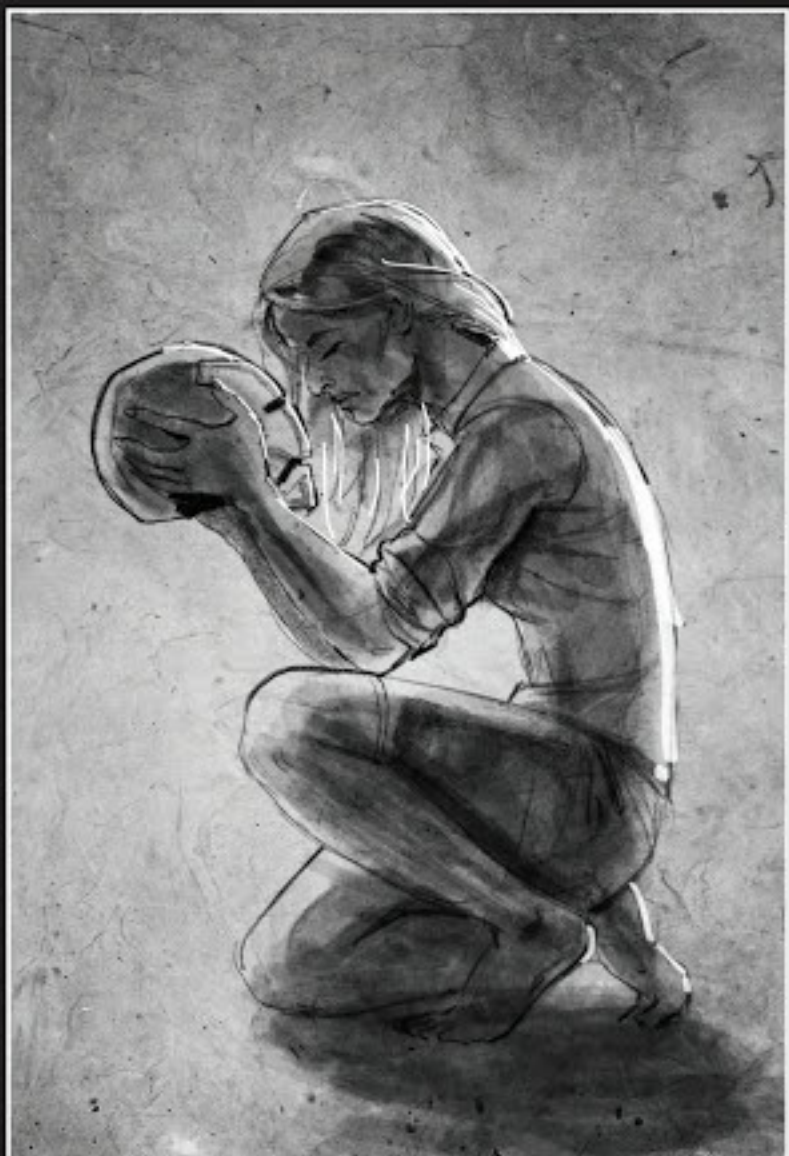




Concept art for the *Iron Man 3* theatrical-poster campaign by BLT & Associates.



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First teatrical teaser poster



3



5/3/13

Facebook.com/IronMan **MARVEL**

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Individual character teaser posters.





Second theatrical teaser poster.





Third theatrical
teaser poster.

ROBERT DOWNEY JR. GWYNETH PALTROW DON CHEADLE GUY PEARCE AND BEN KINGSLEY



MARVEL
IRON MAN 3

MARVEL STUDIOS PRESENTS IN ASSOCIATION WITH PARAMOUNT PICTURES AND DOLBY DIGITAL ENTERTAINMENT A MARVEL STUDIOS PRODUCTION ROBERT DOWNEY JR. "IRON MAN" GWYNETH PALTROW DON CHEADLE GUY PEARCE REBECCA HALL STEPHANIE SZOSTAK
JAMES BARGE DALE WITH JON FAVREAU AND BEN KINGSLEY CASTING BY SARAH HALLEY FINN COSTUME DESIGNER BRIAN TYLER EDITOR DAVID JORDAN PRODUCTION DESIGNER CHRISTOPHER TOWNSEND EXECUTIVE PRODUCERS LOUISE PROSELY AND JEFFREY FORD WRITER PETER S. ELLIOT
PRODUCED BY BILL BOZESNY DIRECTED BY JOHN TOLL BASED UPON CHARACTERS CREATED BY STAN LEE AND WRITTEN BY SHANE BLACK
CINEMATOGRAPHY BY DREW PEARCE AND SHANE BLACK
EXECUTIVE PRODUCERS BY SHANE BLACK
Facebook.com/ironman3
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IN 3D, REAL D 3D AND IMAX 3D
IN CINEMAS SOON

First teatrical teaser poster

ROBERT DOWNEY JR. GWYNETH PALTROW DON CHEADLE GUY PEARCE AND BEN KINGSLEY



MARVEL

IRON MAN 3

MARVEL STUDIOS PRESENTS IN ASSOCIATION WITH PARAMOUNT PICTURES AND DMC ENTERTAINMENT A MARVEL STUDIOS PRODUCTION ROBERT DOWNEY JR. "IRON MAN 3" GWYNETH PALTROW DON CHEADLE GUY PEARCE
REBECCA HALL STEPHANIE SZOSTAK JAMES BARGE DALE WITH JON FAVREAU AND BEN KINGSLEY CASTING BY SARAH HALLEY FINN CSA MUSIC BY BRIAN TYLER EDITOR DAVID JORDAN VISUAL EFFECTS CHRISTOPHER TOWNSEND
EXECUTIVE PRODUCERS LOUISE FROGLEY PRODUCED BY JEFFREY FORD A.C.E. PETER S. ELLIOT PRODUCTION DESIGNER BILL BRZESKI DIRECTOR OF PHOTOGRAPHY JOHN TOLL A.S.C. EXECUTIVE PRODUCERS STAN LEE DAN MINTZ PRODUCED BY ALAN FINE PRODUCED BY CHARLES MCMURTHY
DIRECTOR OF PHOTOGRAPHY VICTORIA ALONSO EXECUTIVE PRODUCERS STEPHEN BROUSSARD EXECUTIVE PRODUCERS LOUIS DESPOSITO EXECUTIVE PRODUCERS JON FAVREAU PRODUCED BY KEVIN FEIGE SCREENPLAY BY DREW PEARCE & SHANE BLACK DIRECTED BY SHANE BLACK

EXPERIENCE IT IN IMAX 3D MAY 3

Facebook.com/IronMan



“Your enthusiasm is highly contagious!” That is what director Shane Black wrote in an e-mail to me when he wrote me to let me know I had landed the job of Production Designer on *Iron Man 3*. Yes, enthusiasm is something I have in abundance, and exactly what I would need and call upon in the ensuing months as we tackled the third installment of the revered *Iron Man* Series.

Immediately upon starting, I realized how vested Marvel Studios is in their characters and how much they care about the look of their films. Good ideas were welcomed, and nothing seemed to be off-limits as long as it supported the central characters. In order to meet the expectations, I put together a great team headed by Desma Murphy the Supervising Art Director and my Set Decorator Danielle Berman, both longtime collaborators.

Working on a film for Marvel was unlike any previous experience I had had. Each week, we held a design review where all visual design work was presented—from the suit and character design to the locations and scenery that were up for approval. Egos were checked at the door, and nothing was off-limits in our discussions. We sat in a small room—with the director, Marvel executives, and the design teams—and hashed out the look of the movie. It was helpful for me to hear from the other artists on the project, and hear their reactions to my work in an honest and straightforward way. This level of collaboration proved essential to achieving the overall look, and figuring out the visual and digital aspects of the movie. My goal on the movie was to create Tony Stark’s world in the most realistic way possible and seamlessly blend in with the visual look of the last two *Iron Man* movies.

My journey of production-designing *Iron Man 3* was not unlike Tony Stark’s journey to solve the riddle of the Mandarin and put his life back together after everything is taken from him. Like Tony, we eventually pulled out of our Los Angeles-based work reality and flew across country to the East Coast from Hollywood. Landing in Wilmington, North Carolina, we took over the entire Screen Gems Studios lot. North Carolina would now be our home for the next year and base of operations that had proximity to Miami, Florida,

where we also had locations. Wilmington turned out to be a great town and a wonderful place where we all enjoyed working. But when we first arrived, we were out of our comfort zone and had to rediscover how to make a large action movie with the assets they had available.

After having designed the first two *Hangover* movies, I seemed to have gained a reputation as the person you go to when you want to create something that is beautifully designed then ultimately destroyed beyond recognition. One of the many tasks I was given was to destroy Tony Stark’s amazing Malibu hilltop mansion and garage workshop! That is easy to say, but knocking a house of that size off a hill into the ocean was challenging. It required the talents of Academy Award-nominated special-effects wizard Dan Sudick. To achieve this, we built a huge hydraulic teeter-totter that could drop the entire house up and down at will. After that, we destroyed a small town, a Hollywood theater, Miami mansions, biotech labs, Air Force One, entire shipping docks, and so on.

De-constructivism was our general design theme and architectural style. We were constantly breaking all the elements of Tony’s world down to their smallest parts—not unlike his suit, which was able to break apart into its small components then reconnect to his body. We pulled Tony out of his comfort zone and put him in that fish-out-of-water scenario. The more detail you put into this effort, the more it pays off visually. In our modern age of audiences, we have become so aware of real chaos and destruction that there is no cheating the looks of these kinds of events in the movies anymore. They expect to see realistic-looking destruction on-screen.

So in the book that precedes these words, you see what great collaboration is all about—all the creative departments that are needed to make an action movie in any place in the world working together with one focus on one character: Tony Stark.


Bill Brzeski

Writer/Director **Shane Black** is one of the pioneering screenwriters of modern action films. At age 26, he wrote the screenplay for *Lethal Weapon* starring Mel Gibson and Danny Glover, launching one of the most successful film franchises of all time. Black subsequently wrote the screenplays for *Lethal Weapon 2*, *The Last Boy Scout*, *Last Action Hero*, and *The Long Kiss Goodnight*, all of which display his uniquely appealing blend of action and character-based humor. In 2005, he wrote and directed the well-received *Kiss Kiss Bang Bang*, which marked a return to the big screen for Robert Downey Jr. *Iron Man 3* reunites Black with Downey in their biggest, most ambitious production to date.

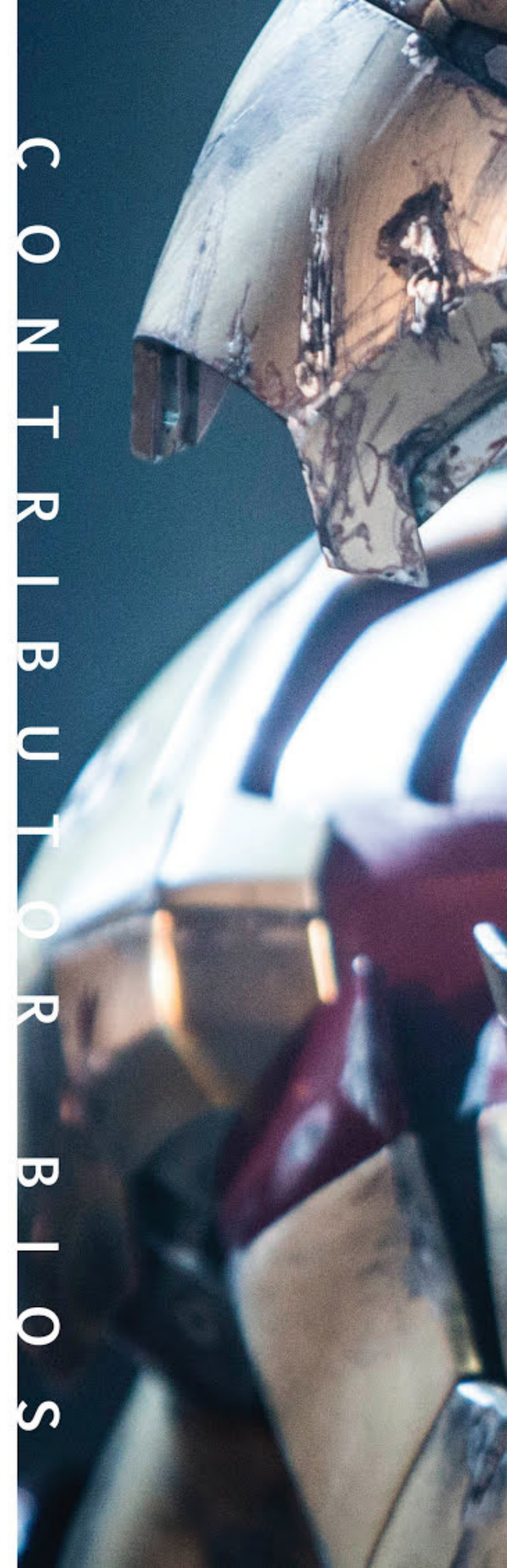
Producer and Marvel Studios President **Kevin Feige** has guided the studio through more than a decade of films and was instrumental in starting up the current era of movies produced directly by the studio. Feige serves as producer for the studio's entire slate of films—including *Iron Man*, *Iron Man 2*, *The Incredible Hulk*, *Thor*, *Captain America: The First Avenger*, *Marvel's The Avengers*, *Iron Man 3*, and the upcoming *Thor: The Dark World*. In that role, it falls to him to coordinate the emergent Marvel Cinematic Universe between the different productions—drawing together a talented pool of directors, producers, actors, and artists to create a coherent film world, the likes of which Hollywood has never attempted.

Executive Producer and Marvel Studios Co-President **Louis D'Esposito** served as Executive Producer on the blockbuster hits *Iron Man*, *Iron Man 2*, *Thor*, *Captain America: The First Avenger* and *Marvel's The Avengers*. He balances running the studio with overseeing each film from their development stage to distribution; he is currently working on *Iron Man 3*, *Thor: The Dark World*, *Captain America: The Winter Soldier*, and *Guardians of the Galaxy* as well as working with Marvel Studios' President Kevin Feige to build the future Marvel slate. In addition to executive producing Marvel Studios' feature films, D'Esposito directed the short film *Item 47* for Marvel, which

was released as an added feature on *Marvel's The Avengers* Blu-ray disc. Prior to joining Marvel Studios in 2006, D'Esposito's executive producing credits include the 2006 hit film *The Pursuit of Happyness* starring Will Smith, *Zathura: A Space Adventure*, and the 2003 hit *S.W.A.T.* starring Samuel L. Jackson and Colin Farrell.

Executive Producer **Victoria Alonso** is currently executive producing Shane Black's *Iron Man 3*, Alan Taylor's *Thor: The Dark World*, Joe and Anthony Russo's *Captain America: The Winter Soldier* and James Gunn's *Guardians of the Galaxy* for Marvel Studios, where she serves as Executive Vice President of Visual Effects and Post Production. She executive produced *Marvel's The Avengers* for writer/director Joss Whedon and co-produced *Iron Man* and *Iron Man 2* with director Jon Favreau, Kenneth Branagh's *Thor*, and Joe Johnston's *Captain America: The First Avenger*. Alonso's career began at the nascency of the visual effects industry, when she served as a commercial VFX producer. From there, she VFX-produced numerous feature films, working with such directors as Ridley Scott (*Kingdom of Heaven*), Tim Burton (*Big Fish*) and Andrew Adamson (*Shrek*), to name a few.

Executive Producer **Charles Newirth** was responsible for the physical production of all of Revolution Studios' 47 motion pictures, including *America's Sweethearts*, *Black Hawk Down*, *xXx*, *Anger Management*, *Daddy Day Care*, *Mona Lisa Smile*, *Hellboy*, *13 Going on 30*, *Click*, and *Rocky Balboa*. He also served as executive producer on Revolution's *The Water Horse: Legend of the Deep*, *Across the Universe*, *Freedomland*, *Christmas with the Kranks*, *Peter Pan*, *Maid in Manhattan*, and *America's Sweethearts*. Before joining Revolution in 2000, Newirth produced *Galaxy Quest*, *Patch Adams*, and *Home Fries*. Additionally, he was executive producer on *Zookeeper*, *City of Angels*, *Ghosts of Mississippi*, *The American President*, and *Phenomenon*. He co-produced *Forrest Gump*, *Toys*, and *Bugsy*, and was an associate producer on



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on *Braveheart* and *Legends of the Fall*. He was nominated for a third Oscar and won an American Society of Cinematographers Award for *The Thin Red Line*, Terrence Malick's adaptation of the WWII autobiographical novel by James Jones. Toll's other feature credits include Francis Ford Coppola's *The Rainmaker*, Ben Affleck's critically acclaimed directorial debut *Gone Baby Gone*, as well as *Almost Famous*, *Vanilla Sky*, and *Elizabethtown*, all for director Cameron Crowe. Other films include *The Last Samurai*, *Tropic Thunder*, and the pilot for the acclaimed television series *Breaking Bad*. His most recent work was *Cloud Atlas* with the directors Lana Wachowski, Andy Wachowski, and Tom Tykver.

Visual Development Supervisor **Ryan Meinerding** has only been active as a freelance concept artist and illustrator in the film business since 2005, but his work is already drawing the kind of raves reserved for veterans of the industry. After earning a degree in industrial design from Notre Dame, he transitioned to Hollywood and worked on *Outlander*. Subsequent to *Iron Man*, he worked on *Transformers: Revenge of the Fallen* and illustrated costumes on *Watchmen*. While working on *Iron Man 2*, Meinerding contributed the design for the new Iron Man armor in the comic-book series *Invincible Iron Man*, continuing to cement the strong bonds between Marvel Studios and Marvel Comics. He was part of the *Iron Man* crew nominated for the 2009 Art Directors Guild Excellence in Production Design Award for Fantasy Films, was one of the main concept designers for *Thor*, and served as visual development co-supervisor on *Captain America: The First Avenger* and *Marvel's The Avengers*.

Physical Suit Effects Supervisor **Shane Mahan** worked with Stan Winston for over two decades, so it was only natural that—along with colleagues Lindsay MacGowan, Alan Scott, and John Rosengrant—he founded his own FX company. Since opening its doors in 2008, Legacy Effects has been involved with a series of high-profile films, including involvement in

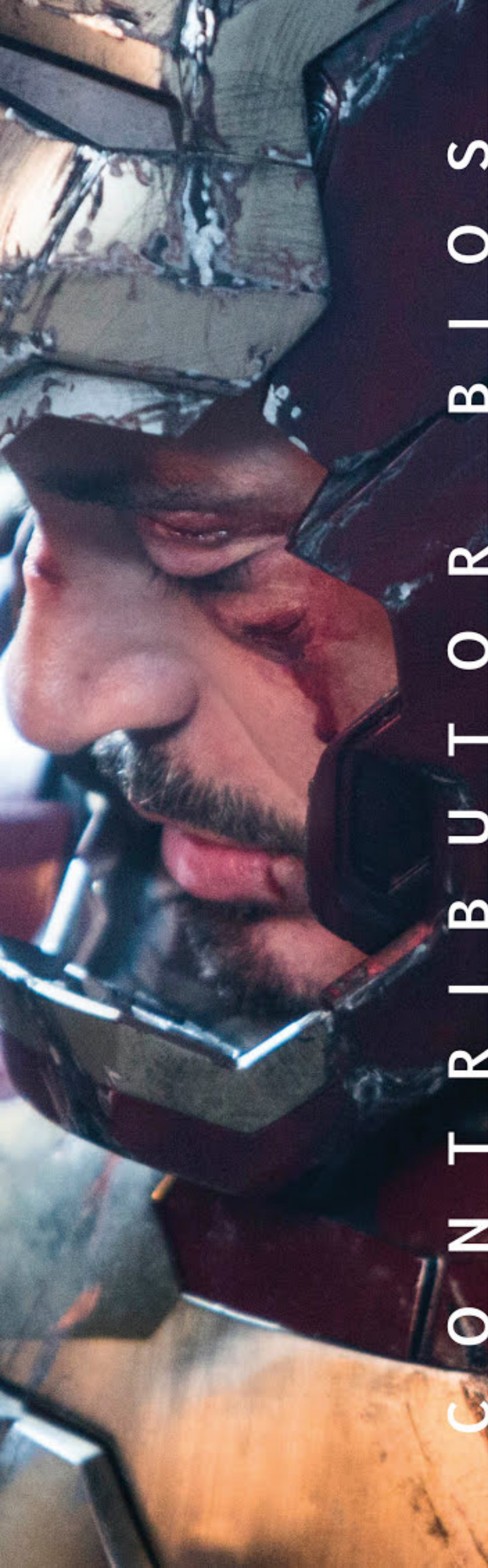
Marvel Studios Phase One of the Marvel Cinematic Universe. Co-owner and FX Supervisor Shane Mahan has played an important role in bringing practical effects to life in films including *Iron Man*, *Iron Man 2*, *Thor*, *Marvel's The Avengers*, and now *Iron Man 3*. Additionally, Mahan has supervised various effects for films such as *Cowboys & Aliens* and Guillermo Del Toro's *Pacific Rim*. Concurrently, the Legacy Effects studio has been involved in a wide range of film productions such as *Snow White & The Huntsman*, *The Muppets*, *Life of Pi*, *The Bourne Legacy*, *Twilight: Breaking Dawn* and many more.

Property Master **Russell Bobbitt's** resume includes all three of Marvel's *Iron Man* films, *Thor*, and *Captain America: The Winter Soldier*, as well as *Oz: The Great and Powerful*, *The Hangover* and *The Hangover Part II*, and J.J. Abrams's *Star Trek*. Tasked with the design, manufacturing, and acquisition of film props, as well as the establishment of prop continuity from scene to scene, Bobbitt has been developing the physical reality of iconic movies for 30 years. He has twice won Hamilton's prestigious "Behind the Camera" Award for Best Property Master. He has also won two Telly Awards for directing. He resides in Los Angeles with his wife, Tracy, and daughter Jordan.

Set Decorator **Danielle Berman** has previously worked on *The Hangover*, *Into the Wild*, *Memento*, and *Due Date* as well as on many commercials, music videos, and television shows. She was nominated for an Emmy for her work on the television show *House*. Born in Brooklyn, Berman earned her BFA in Manhattan, where she worked as a still photographer before relocating to Los Angeles to work in film.

Visual Effects Supervisor **Christopher Townsend** was the overall VFX Supervisor on Marvel's *Iron Man 3* with writer/director Shane Black. Townsend grew up in England, then traveled and worked throughout Asia and Australia before moving to the USA in 1994 to work at Industrial Light & Magic. He worked





as an artist and supervisor on many influential movies, including *Star Wars* (both the rerelease of the original, *A New Hope*, and the new trilogy), *Mission: Impossible*, *The Lost World: Jurassic Park*, *AI: Artificial Intelligence*, *Hulk*, *Day After Tomorrow*, *The Island*, and the Academy Award-winning *Pirates of the Caribbean: Dead Man's Chest*. In 2007, he became a freelancer and was the VFX Supervisor on Walden/New Line's *Journey to the Center of the Earth*, which made it to the Academy VFX Bakeoffs; it was the first ever stereoscopic motion picture shot and released in HD. He supervised on location for Fox's *X-Men Origins: Wolverine*, oversaw the VFX in Europe for Warner Bros' *Ninja Assassin*, supervised on Fox's *Percy Jackson and the Lightning Thief*, and again made it to the Bakeoffs in 2012 as the VFX Supervisor for Marvel's *Captain America: The First Avenger*.

Concept Artist **Andy Park** began his career as a comic-book artist illustrating such titles as *Tomb Raider*, *Excalibur*, and *Uncanny X-Men* for companies like Marvel, DC, and Image. In 2004, he began working as a concept artist on video games, commercials and TV series. He was one of the lead artists creating the worlds of the *God of War* franchise for Sony Computer Entertainment of America. Park has since joined the team at Marvel Studios as a visual development illustrator, designing characters and key-art illustrations for *Marvel's The Avengers*, *Captain America: The First Avenger*, *Iron Man 3*, and several upcoming films.

Concept Artist **Rodney Fuentebella** has degrees in design from UCLA and Product Design from the Art Center College of Design. He has worked on various projects for Electronic Arts, Atari, Rhythm and Hues, Dreamworks Animation, and WIRED magazine, as well as various other entertainment and commercial projects. In film, he worked as a concept artist at Rhythm and Hues before joining the Visual

Development team at Marvel Studios. Fuentebella has created key-art illustrations for *Captain America: The First Avenger*, *Marvel's The Avengers*, and for upcoming Marvel Studios films.

Lead Storyboard Artist/Animatics Supervisor **Federico D'Alessandro** was born in Uruguay and raised in Colorado. He has made a name for himself as one of the top storyboard artists in Hollywood and was a key creative force behind a multitude of blockbuster films, including *I Am Legend*, *Where the Wild Things Are*, and *The Chronicles of Narnia* series. In 2009, he was picked up by Marvel Studios, where he has played an important creative role in films such as *Thor*, *Captain America: The First Avenger*, *Marvel's The Avengers*, and the upcoming *Thor: The Dark World*.

Concept Artist **Phil Saunders** contributes his design expertise to a variety of fields including film, video games, theme parks, and product and automotive design. A frequent collaborator on Marvel Studios productions since making significant contributions to the visual look of the original *Iron Man* feature, Saunders has also worked with virtually every other major studio on such features as *Cowboys & Aliens*, *Tron: Legacy*, *Spider-Man 3*, *Jarhead* and *Zathura: A Space Adventure*. Saunders got his start designing cars for Nissan's satellite think-tank studio in San Diego, followed by a decade as Creative Director of award-winning game developer Presto Studios, where he directed the design of many acclaimed titles including the *Journeyman Project* series and *Myst 3: Exile*.



A C K N O W L

Victoria Alonso
Danielle Berman
Shane Black
BLT & Associates
Russell Bobbitt
Tom Brevoort
Stephen Broussard
Bill Brzeski

Don Cheadle
Federico
D'Alessandro
Frank D'Armata
Louis D'Esposito
Marko Djurdjevic
Andrea Dopaso
Robert Downey Jr.

John Eaves
Warren Ellis
Kevin Feige
Louise Frogley
Rodney Fuentebella
Adi Granov
Jeff Habberstad
Don Heck

Josh Herman
Jeffrey Huet
Jacob Johnston
Ben Kingsley
Jack Kirby
Theodore W. Kutt
Stan Lee
Legacy Effects



E D G M E N T S

Andrew Leung	Danny Miki	Guy Pearce	Chris Townsend
Larry Lieber	David Moreau	Manuel Plank-Jorge	Trenton Waterson
Lindsay MacGowan	Charles Newirth	Paolo Rivera	Charlie Wen
Shane Mahan	Josh Nizzi	John Sampson	Weta Digital
Rob McKinnon	Carlo Pagulayan	Phil Saunders	Dean White
Steve McNiven	Gwyneth Paltrow	Brian Smrz	
Ryan Meinerding	Gerald Parel	Chris Swift	
Ron Mendell	Andy Park	John Toll	



